Hazardous Materials Tracking System

U.S. DEPARTMENT OF TRANSPORTATION Maritime Administration and the U.S. Navy

In cooperation with National Steel and Shipbuilding Company San Diego, California

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Hazardous Materials Tracking System

Final Report

by:

Insight Industries, Inc. One Insight Drive Platteville, WI 53818 (608) 348-8815

for:

SNAME Panel SP-1 on Facilities & Environmental Effects

under:

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This project was performed under the auspices of the National Shipbuilding Research Program with the direction of the SNAME Panel SP-1. This report is the result of a yearlong study of the methods, design and programming for a generalized shipyard hazardous materials tracking system. The approach was to use the most modern, flexible and powerful software/hardware tools available--IBM PC network environment with the associated software database products.

We would like to express our thanks to Lyn Haumschilt and T. Michael Chee of the National Steel and Shipbuilding Company (NASSCO) in San Diego for their continued support and encouragement; to Don Johnston and Gary Higgins of Peterson Builders, Inc. (PBI) in Sturgeon Bay, Wisconsin and all the other shipyards that provided the details of shipyard operation. One of the appendices lists the numerous companies and individuals who without their help this project would not have been a success.

In the 1970s and 1980s, the shipbuilding industry lost some of its competitive edge to overseas shipbuilding and repair operations. Several things can be done to restore the industry to its proper place in the world market. One way is to be smarter in utilizing computers. Most shipyards now possess the hardware and software but have only begun to use these resources to solve problems in the production arena. Computers no longer need to be restricted to offices; they can now become an integral part of the shop floor supervision and management tasks.

This report details the development of the Hazardous Materials Tracking System (HMTS). Other possible enhancements or additional modules (e.g. advanced labeling systems, MSDS scanning modules, live shipyard installation) are suggested, and a summary of these enhancements is detailed in the conclusion.

A major reason for the increased attention on hazardous chemical tracking was the passage of the Superfund Amendments and Reauthorization Act (SARA) and its predecessor, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Shipyards quickly became targeted by local environmental groups because of their location to scenic harbors and the potential for environmental damage to these areas from daily hazardous materials use. The level of detail now required for reporting the quantities and locations of hazardous materials to local, state and federal agencies requires nothing short of a computer system with modem software and hardware tools.

This report details the development process: hardware environment, database tools, chemical database selection, bar code scanner, printer selection, database design, program development/debugging and user interface.

A complete user's manual is included as one of the appendices. This manual includes installation, operation and maintenance. HMTS can run either as a single or multi-user PC compatible network application.

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Before any computer programming was done, several other major tasks had to be completed. These preliminary tasks included: shipyard visits; determination of hazardous material regulation and reporting requirements for the shipyard environment; choosing computer hardware and software; choosing bar code scanning and printing hardware/software; and selection of database design.

Shipyard Visits

Two shipyards were visited: Peterson Builders, Inc. in Sturgeon Bay, Wisconsin and NASSCO in San Diego, California. They provided an understanding of the major operations and components of typical shipyard environmental practices. Time and budget restrictions prevented visits to any other shipyards. However, it is felt that these two yard visits, along with the feedback from presentations at panel meetings, gave us enough information to design a fully SARA-compliant Hazardous Materials Tracking System. Discussions with environmental managers at other shipyards and feedback from demonstration diskettes helped make up the difference. In addition, visits to local non-shipyard industries gave us more insight into the handling and tracking of hazardous materials. An attempt was made to focus on those companies that made use of technologies which would be explored during the research project.

Reporting Requirements

The starting point for all tracking and reporting is SARA Title HI. Section 312 requires reporting of daily averages, quantity on hand and location of hazardous materials. One of the options within HMTS produces a report that supports Tier II reporting. Reports from HMTS that are used internally (e.g. chemical quantity by location, products containing a specified chemical) are also detailed enough to satisfy most current local and state reporting requirements. The new states list of regulated chemicals can be added without major programming changes as the HMTS system is flexible.

Computer Hardware Requirements

Even though HMTS was designed with an IBM PC-based network in mind, it is generic enough to be used with a relational database system on virtually any hardware platform. Because the PC-operating environment is flexible and the shipyard industry needs to be on the leading edge of technology, the decision was made to design and test HMTS with a relational database that was supported by an industry standard network environment.

Consideration was given to other hardware platforms, e.g. minicomputers and mainframes. However, while most shipyard environmental departments have access to these systems, the computer system in many cases is less flexible than a PC system. Therefore, to use an existing computer system might be cost prohibitive. Using PCs not only offloads the computing demands from the mini or mainframe, but response time is dramatically

improved. Shipyards that have a number of PCs already placed throughout the yard can inexpensively connect the machines in a network. While a 386-based PC is recommended for using HMTS effectively, an 8088-based PC "clone" with 640K and monochrome monitor with graphics capability will be able to use HMTS with minimal delays in response time. **TEAM-UP is** not dependent on a particular processor and thus the more processing power, the more efficient the system will be.

Various hardware and software tools were considered from several viewpoints: cost, maintenance, performance, integration with other software and hardware and user interface.

Database Selection

Many database packages were screened for their ability to meet the critical requirements of HMTS. After the general review, the choices were narrowed to four PC-based database products: Oracle, Clarion, DBase IV and TEAM-UP. Because of the complexity of the project, speed of data retrieval was not the only criterion used to select the database product. Other important criteria included: end user interface, technical support, cost per additional network user and programmer tools. Another important consideration was how well the database package documented the tables, screens and variable definitions, so that any conversion to another database package or hardware platform would go as smoothly as possible. In addition, the database definition language would ideally accept the HMTS database definition (IDEF and ERA defined data structures described in later sections) with little or no change.

Oracle

Oracle is a very powerful, fully relational database product that runs on virtually every hardware platform, from micro to mainframe. Unfortunately, Oracle consumes huge resources and has performance problems on anything but a high-end machine with at least four megabytes of memory; most shipyards will not have this class of machine throughout the yard. The licensing per PC/workstation was also prohibitively expensive compared to the other products considered. The best use for Oracle was either developing an application on a PC and then moving it to another hardware platform or putting a limited set of tools on a PC and locating the database and most of the database access routines on the mainframe. For a shipyard, this would not be a cost-effective or efficient solution. Making the system fast and self-sufficient on a PC network using a number of PCs with wide-ranging hardware configurations would preclude using Oracle. The relational database design of HMTS, however, would make it easier to implement on a network or multi-user system that already has Oracle.

Dbase IV

The latest versions of Dbase IV from Ashton-Tate have been plagued with bugs and serious multi-user and access time problems. Multi-user licensing is also expensive. Other Dbase "compatible" systems (e.g. FoxBase/Pro, Clipper) are moving away from the Dbase "standard". For these reasons it was felt that a Dbase solution would not be acceptable for HMTS development.

Clarion

The runtime .EXE modules from Clarion incur no licensing costs per additional user. Screen design time is short but debugging becomes a significant problem except for the most experienced programmer. Clarion user groups meet on a regular basis in every major metropolitan area, providing help and ideas directly from other users that may be having the same problems. Clarion is supported by a developer's newsletter, a technical bulletin newsletter, two bulletin board systems and an independent technical journal. Unfortunately, Clarion remains plagued by bugs and thus data integrity may suffer.

TEAM-UP

Programs developed with TEAM-UP run in very little memory (140K Ram). The distributing process technique used by TEAM-UP makes most operations perform very fast. TEAM-UP comes with many built-in searches that are user friendly and fast. TEAM-UP has a full security system and an excellent audit trail process. Conversion from single-user to multi-user is effortless.

Although runtimes are nearly one-third of the full TEAM-UP system cost, the fast searching, security, TEAM-UP's proven multi-user track record, flexible procedural language, lack of system bugs, immediate technical support and ease of use, make TEAM-UP the best database choice. In HMTS, TEAM-UP acts as the core software which maintains all data applications, generates all required HMTS reports and integrates with all purchased software modules.

Bar Code Symbology

Several popular bar code formats were considered for HMTS: Code 39, Code 93/128, Interleaved 2 of 5, Code 49 and UPC/EAN.

Code 39 (Code 3 of 9) has very widespread acceptance and is the standard in a number of industries (e.g. defense, health and automotive). It is self-checking and can be used with a check character for additional data integrity.

Codes 93 and 128 are high density, space-efficient alternatives to Code 39. Both contain required one- or two-check characters for data integrity. Code 128 has three different "character sets", one of which allows "double density" numeric data, effectively putting twice as much numeric information in the same amount of space.

Interleaved 2 of 5 is a numeric-only code used mainly in the distribution industry. The fowl-length 2 of 5 readers and the "bearer bars" (to prevent partial scans) make this an accurate but restrictive symbology.

Code 49 is a relatively new, high density, multi-row code. The advantages are extremely high data security and a "footprint" that makes it easy to use in very small areas that do not have the room for a long, single-row code.

UPC comes in several different versions. The most popular is version A, which encodes 11 digits into a single symbol. Version E is a physically small symbol (6 digits instead of 11) used in situations where an 1 l-digit symbol would take up too much room. The main application of UPC is in the retail industry, starting with grocery stores and spreading to all retail merchandisers. ¹

The wide popularity of Code 39 and its presence in the defense industry made this the best choice for HMTS. Other symbologies have a higher density or slightly more flexibility. If there is a specific need for a particular coding system in a specific shipyard or application, HMTS can be easily modified to accommodate these changes. In addition, most bar code readers are equipped to automatically detect and decode a number of different formats.

Consequently, the bar codes used to identify hazardous chemical containers in HMTS make use of the Code 39.

Bar Code Scanner

The bar coding industry is a rather mature field (the earliest patents and techniques were developed in the early 1960s); there are literally thousands of bar code scanners on the market. The goals in choosing a scanner included the following criteria: ability to detect a number of different symbologies, adaptability to different hardware devices, programmability, portability, technical support and upgradability.

Since the intended hardware platform is an IBM PC or PC network, the first consideration was to investigate bar code scanners that were designed to be used with IBM PCs. The ideal scanner would also have numerous software modules and stand-alone programs available that would make the scanner easy to use with a number of PC-based programs and languages.

Another consideration was the type of scanner ("input device") used to read the bar code: hand held or fixed, fixed or moving beam, contact or non-contact and portable or fixed location. Ideally, the "decoder" portion of the bar code reader would be flexible enough to accept a number of different input devices.

The Tricoder model T50 from Worthington Data Solutions was chosen for the development of HMTS (see Figure 1). The particular model chosen has a medium-resolution contact wand, is portable and its associated software modules are well under \$1,000. While no single bar code reader will be suitable for every application, the WDS Tricoder was found to be a good solution for a number of different environments. The Tricoder ran selectively read a number of different symbologies (e.g. Code 39, Code 128, 12 of 5, Codabar, UPC/EAN). The recognition for each symbology can be selectively enabled or disabled to

¹INTERMEC Corporation, <u>An Introduction to Bar Code Svrnbology</u>, Lynnwood, Washington, 1989, pp. 4-6.

further enhance accuracy. The RS-232 serial connection can be attached to the serial port on a PC or any device with a standard RS-232 port. The Tricoder has a powerful programming language. The user can be prompted for items, quantities and locations. Different types of wands can be easily substituted for the wand included with the device (laser, low/medium visible light, high resolution infrared, mag stripe reader).

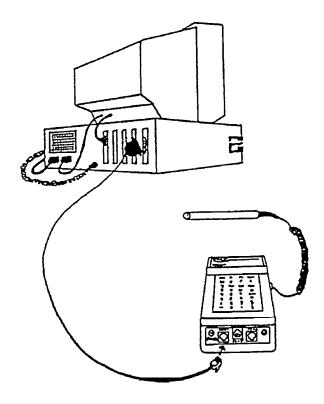


Figure 1: Tricoder Model T50 from Worthington Data Solutions

The software available for the Tricoder also makes this reader a good choice. The BarKey software allows input from the Tricoder to be transmitted as if it were coming directly from the keyboard. Other modules include laser and dot matrix printer bar code printing software, a collection of multi-dropped reader data, label design and stand-alone label management. Of course, the label management programs will run on a PC regardless of the brand or type of bar code scanner being used.

The Tricoder's portability, rugged construction and 10,000 label memory made it ideal for applications where it is not feasible to bring the individual labels or containers to the PC workstation.

The primary use of the Tricoder was to be used in an audit mode. HMTS has been designed with several utility options and a report that work together to produce a detailed listing of HMTS system container quantities versus quantities found in the shipyard.

The process is quite straight forward. First, the Tricoder is taken into the yard in a portable mode with the wand attached. As the user finds containers, the bar codes are scanned. The container ID#, area, quantity, unit, date and time are collected in the Tricoder's memory.

Upon returning to the host computer, the Tricoder RS-232 serial connection cord can be connected and the data transfer process can begin. A program has been written for the Tricoder to collect this information. The program can be found among the system files. The name of the program is "TRI_PGM". In the event that the Tricoder is purchased the program "TRI_PGM" will need to be loaded into the Tricoder's memory. The data transfer process from the Tricoder to the host computer involves sending the data from the Trimder to a text editor within TEAM-UP. The text editor gives the user a chance to review the data before it is imported to the Yard Audit application. Once the data is transferred to the host computer, the import process can be run. Finally, the comparison report can be generated. The comparison report will identify where HMTS varies from what was found during the yard audit.

Bar Code Printer

As with bar code scanners, there are hundreds of choices when considering bar code printers. For a given application, a particular type of dedicated bar code printer may be the best solution for a specific location or environment. However, the approach for this project was to make the best use of equipment that a shipyard may already have. A standard 8-pin IBM PC compatible dot matrix printer was found to produce very high quality bar code labels when using a newer ribbon and a medium resolution contact wand with the Worthington Tricoder. Several other printers were tested including 24 pin printers. Similar favorable results were experienced with the additional printers tested. For volume printing, a more rugged or higher speed printer may be required, but the HMTS program would require little or no change.

Bar Code Labels

For a large number of items that need to be labeled, a standard pin-feed gummed label with a standard printing ribbon may be sufficient to produce a label that will be readable numerous times by an average quality bar code reader. Other environmental conditions (e.g. outdoor storage locations, extreme heat or cold, spillage from the product itself) may warrant special labels. A number of alternatives are available in this case: polyester labels, polyester overlays for standard labels and indelible inks. A change in the type of bar code reader or the size of the label itself may be considered if these other options fail to produce a reliably readable label. Again, the flexibility of the hardware and software used to develop HMTS allows these changes with minimum impact.

HMTS can print bar codes on almost any size label. The limiting factor is the resolution of the bar code scanner used.

Although, the software purchased with the Worthington Tricoder device will print any size and type of label, it was determined that a very simple label was needed for the majority of HMTS labels. The majority of HMTS labels would contain simply the bar code and the associated hazardous product identification number. It is easy to understand that when considering labeling every hazardous container within a shipyard, the label must be kept simple. During discussions with several shipyards, it was discovered that high quality preprinted bar codes with a sequential numbering system would be the optimum situation. Since the bar code label would be applied during receiving, pre-printing labels for each order seemed to be an additional burden that was not necessary. Also, by purchasing the labels ahead of time, obtaining high quality bar codes is possible without the expense of high cost printers. In essence, the printers used for printing bar codes in the shipyards would be used for printing replacement labels and specialty labels.

Chemical Database

The choices for the chemical database were quickly narrowed down to four. The best chemical list would have the following characteristics:

- 1. Large number of chemicals, most of which are used in a shipyard environment
- 2. File format easily converted to other database formats
- 3. Minimal licensing fees for using the chemical data in other applications
- 4. Regular updates with technical support
- 5. Flags or indicators included for federal or state HazMat lists (e.g. SAW 302, California AB2588)
- 6. Good "front end" program that can be used to query the original database and verify the operation of programs (such as HMTS) that may be using the same data in a different format

While finding a chemical database that satisfied all of these criteria may seem difficult, there is one that comes very close: CHEM Master. The following chemical databases were considered for HMTS development:

	CAMEO from NOAA								
2,600 che	micals, 26 MB storage required, synonyms								
PROS	Essentially free, large list of chemicals								
CONS	Not updated regularly, limited NFPA/HMIS fields, large storage requirements even after selected fields are removed, laborious conversion from text fields to numeric fields, many SARA chemicals not in list								
The CAM PC version	EO database is currently being enhanced, and some of the Apple Macintosh modules will soon appear in IBM								
Roytech Suspect Chemical List									
	Roytech Publications, 7758 Wisconsin Avenue, Bethesda, MD 20184 (301) 654-4281								
	nemicals, 10 MB, assigned SEQ# for missing CAS numbers, monthly updates, synonyms, DB IV format files 58,500/year								
PROS	Leading chemical list publishing, several state lists (CA, PA, NJ; WI and CA to be added soon), some NFPA/HMIS flags set								
CONS	Extremely high price, not all state lists available now, no VOC indications, special conversion to provide Dbase IV format files								
	CHEM Master from Envirogenics								
	P.O. Box L893, Langhome, PA 19047 (800) 527-7213								
65, CERC no addition	micals, 6 MB file size, ALL current state and federal lists (IL and federal DOT, EPA carcinogen, NJ, CA LA, OSHA, ACGIH, SARA 302, 304, 313; CA AB2588 to be added soon), synonyms, Dbase III format at nal conversion cost, updates twice a year or when major lists appear, \$750/year plus \$600/year for upgrades ited technical support, base software package included								
PROS	Low relative cost, all necessary fields are already in database, all state lists (except CA AB2588) are already flagged in the database, 4,600 chemicals								
CONS	Large text fields are missing or brief-these fields would normally appear on MSDS								
	SARATRAX from IIT Research Institute								
	2719 Pulaski Highway, Edgewood, MD 21040 (800) 458-1564								
	plus \$300/year for updates, technical support for three months, 1,200 chemicals (SARA III lists only), only ym for each chemical								
PROS	Form R pre-printed on laser printer are acceptable to EPA								
CONS	Low number of chemicals, no state lists, limited synonyms								

The clear choice is CHEM Master from Envirogenics. There is practically nothing in any of the other databases that this one does not have. This database was designed with SARA compliance in mind. As a result, HMTS uses most of the fields in this database. It is very easy to convert this database to TEAM-UP format and many other database formats. At a cost of under \$1,000 (plus \$600 per year for upgrades and technical support), it is the best value in the group.

NOTE: Because the chemical database is not a deliverable with HMTS, the end user may either buy CHEM Master or one of the others on this list, import/convert a listfrom another shipyard or look for another list that rnay fit their needs more closely. In any case, because of the wide variety of file formats and types available on the market, HMTS only imports the CHEM Master database. Other chemical databases can be imported into HMTS with additional programming.

Another option that some yards may consider is to build the chemical list themselves from the chemicals appearing on MSDSs. While this may be time-consuming at first, it would be the best way to include the chemicals used at a particular shipyard. For the convenience of the user a report has been added to list all chemicals added by the shipyard. In the case of an update from CHEM Master, this report could be run in order to validate that the new chemicals from CHEM Master are not the same the shipyard added on their own. Please see the HMTS user's manual to import the CHEM Master database into HMTS.

Throughout the development of HMTS, several consultants were utilized in determining HMTS'S ability to meet government regulations. HMTS was reviewed by the consultants with respect to functionality, completeness and visual appeal.

The consultants were instrumental in the development of the IDEF and ERA models which determined the underlying structure of HMTS. (See IDEF Models and ERA Design Notes for further information).

The following paragraphs refer to several comments/suggestions made by the consultants during the project. Comments felt appropriate were reviewed and integrated into the system.

- 1. Cursor movement is confusing in the Hazardous Product application.
- 2. Black characters on gray should be used for NFPA and HMIS areas.
- 3. Filters should be added to the reports, especially in the container listing.
- 4. Densities should be loaded for hazardous products. Densities loaded in hazardous products would then be used to calculate Tier II reporting.
- 5. Shelf Life of Container should be added to the container application.
- 6. Open Container Date should be retained, even though it is a difficult piece of data to maintain.
- 7. Method of calculating expiration date of container should be added.
- 8. Each container should be uniquely identified with a label consisting only of the container identification number.
- 9. The location of Synonym should be changed to the Hazardous Product application.
- 10. The program allows the user to bypass Date Received and Container Quantity in the container application. Entry of the Date Received and Container Quantity should be required.
- 11. In order to maintain this type of system where a great deal of discipline is necessary, a newsletter of changes should be distributed to the work force when changes occur.
- 12. Suggest Hazardous Product "Unknown Description" field be added to Hazardous Product application. This will allow containers to be checked into inventory even though a MSDS could not be identified. Later the unknown description will be very helpful in positively identifying the material and assigning a hazardous product identification number.
- 13. Make the identification of responsible employee optional. Most yards will find it difficult just to identify department, area, process, etc. The employee field should not be removed because there may be yards that wish to track at the employee level.
- 14. A default of one year should be used for the expiration date if no expiration date is entered for a container.
- 15. The user should be able to empty a container versus entering in the exact amount to zero out a container.

- 16. As the system is implemented, it is suggested that the shop floor personnel be directly involved in entering in the use of container amounts versus having the results pooled and entered at a central location. To accomplish this the system will need to be user friendly since non-computer literate workers will be using the system. A formal training program is highly recommended. Possibly the use of video tapes could assist in the training process. This tends to instill a sense of ownership.
- 17. Add the ability to identify the Plant or site that the container is assigned.
- 18. If possible, audit trails should be added to the container application such as record stamping of username, date and time. Also, being able to review deleted records and old updated records would be a big help in determining where a container got off track.
- 19. Add an application that allows the addition of many hazardous product chemical component records.
- 20. Add an application that allows the multiple entry of containers that are exactly the same. This would be used when a shipment is received with cases or pallets of the exact same material; the only difference being the container number.
- 21. When material is received in very small amounts such as tubes, assign a container number to the case versus each tube.
- When material is moved from one department to another, have the department who is moving the material to another department be responsible for entering the transfer record.
- 23. Make sure the report generating information to support Tier II reporting flag those chemicals that go over the Threshold Planning Quantity.
- 24. The reader of the final report should realize that the program will require a significant degree of discipline from the work force. But this is possible since the program allows for the user to gradually work into full tracking. In other words, the user can start by tracking 55 gallon drums and higher, than move to five-gallon pails and higher and finally move to gallon pails and higher, etc.

It was suggested by the consultants that a label consisting of only a container number be applied to every container. As the containers enter the production area, HMIS and NFPA labels could be applied. The importance of the container label is that it can quickly be applied and not slow down the receiving check-in process.

If a container that was being checked in did not appear on the shipyard's list of approved Hazardous Products, the description of the unknown product could be recorded. When receiving has time, unknown products could be tracked down and either assigned the correct hazardous product identification number or be identified as needing a hazardous product identification number.

The consultants proved to bean invaluable source of information in keeping HMTS on a development path that paralleled U.S. shipbuilding practices and production limitations and constraints.

The design of the HMTS database was the first and most important step of the project. Any mistakes made in this phase would be magnified in later steps, possibly requiring major programming changes late in the development cycle.

The scope of the project needed to be defined first. Will this system only track hazardous chemicals or should hazardous wastes and the associated paperwork with shipping manifests be considered? Will the system enhance or completely replace the hard copy MSDS system? Should employee training and certification be considered?

Within the constraints of the contract, it was determined that only hazardous chemicals would be tracked and reported. Of course, any chemical in any quantity can be tracked for inventory purposes. The focus of the system was to maintain the list of those chemicals that must be reported to local, state and federal agencies if used, stored or otherwise processed over certain quantities.

Employee training was not considered to be in the scope of the system, and only the key fields from the MSDS would be entered into the system.

The database design was accomplished in a two-phase hybrid approach: the fuctional design using IDEF and the database tables using ERA. These two methods are further detailed in the next two sections.

The first step of the "hybrid" approach uses the IDEF_o (ICAM Definition-0) methodology to define the functional model of a shipyard: the "as-is" or "to-be" of the day-to-day operations of hazardous materials tracking in a shipyard. In the case of HMTS, the "ideal" shipyard was modeled. No data or files are defined in this step; the ERA Design Notes section details this second step using the ERA (Extended Relational Analysis) method.

IDEF was developed by the United States Air Force during the 1970s as the mainstay of its ICAM Program. ICAM was intended to "bootstrap the American aerospace industry into the Factory of the Future technology." To do this, it developed a generic architecture of manufacturing and a language to build and maintain that architecture. IDEF₀ and its companion methodologies, IDEF₁ and IDEF₂, were intended to be used to create the "as-is" model of current operations and the "to-be" model of future operations. The ICAM program was cited by the National Academy of Sciences as being one of the most significant technology development programs ever conducted by the government.³

IDEF methodologies are in widespread use in the military, aerospace industry, automotive industry and numerous other Fortune 100 companies for software engineering, factory modernization, corporate restructuring and planning. In addition, Peterson Builders, Inc. in Sturgeon Bay, Wisconsin is using IDEF extensively for shipyard shop floor control.⁴ A project is also underway at the David Taylor Research Center to model the operations of an entire shipyard using IDEF₀ and IDEF_{1x} techniques.

The IDEF layouts are detailed in one of the appendices.

²IDEF Terminology: "current state" or "ideally".

³Manufacturing Systems, Redesigning the Coloration with IDEF's Help, December 1988, p. 26.

⁴J. Jessup and J. Rogness, <u>Approaching Shipyard Shop Floor Control Using IDEF Systems Analysis Tools</u>, SNAME 1990 Ship Production Symposium, Milwaukee, Wisconsin, August 23, 1990.

The ERA (Extended Relational Analysis) method was used for the second phase of the database design: the data files (tables) and fields (data elements) that define the information stored in the database. While $IDEF_{ix}$ can also be used for this process, it was found that the ERA method would produce the table designs more quickly and in a more straightforward manner. The $IDEF_{0}$ diagrams were still a key element in the table design process, however.

ERA is a database design process whose key element is an interview process that uses simplified terminology to produce a set of tables in third normal form. There are no notes, bubbles, diagrams or arrows--just a set of tables that can be populated with data supplied by the users. The implementation of the relational database is a straightforward translation from tables on paper to tables on the computer.⁵

The ERA method evolved from a need for a simpler tool, one which would be easier to understand than the high learning curve that IDEF_{IX} requires. No complex diagramming methods or graphics packages are necessary for ERA. The acronym ERA also stands for Entities, Relationships and Attributes, which are the three main elements of an ERA design.

Refer to the Application Listings in the TEAM-UP Specifics appendix.

⁵Information Center, <u>Basic Data Modeling</u>, September 1988, p. 30.

The Proposed HMTS Model represents how all entities affected by HMTS fit together. The model traces the path that a container would take as it makes its way from the receiving area to production. Although this project has not actually been implemented, the following list of activities is proposed as a typical set of procedures to follow in handling hazardous chemicals in HMTS. Many of the methods mentioned in handling hazardous chemicals come from the environmental consultants that were involved in this project.

- 1. Hazardous container is received
- 2. MSDS is sent to the HMTS responsible department
 - a. HMTS is updated with new MSDS information
 - b. Container is labeled with a container bar code id#
 - c. If appropriate, HMIS or NFPA labels are placed on container
 - d. Receipt of container information is put in HMTS
- 3. Containers are sent to WHSE or directly to production where move information of container is entered into HMTS
- 4. Use information is entered into HMTS via production personnel
- 5. HMTS reports are generated

Please see Figure 2 for an example of the HMTS proposed sequence of events.

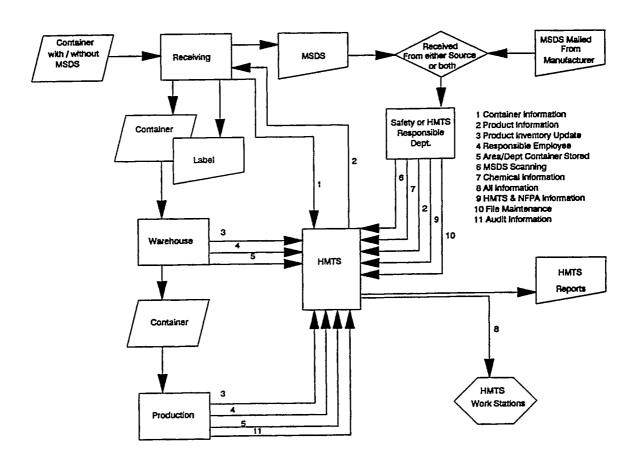


Figure 2: HMTS Proposed Sequence of Events

Calculations within HMTS are very similar throughout the program. For example, explaining how Tier II report numbers are generated will best demonstrate the calculation methods used in HMTS.

Throughout the program all values are consistently converted to either gallons and then pounds whether or not metric units are used. Containers that are entered into the Container application are entered with a quantity and a unit. If the unit is a metric volume unit, the quantity is converted to gallons.

Next, the gallons are converted to equivalent pounds using the density entered in the Hazardous Product application. The Container application and the Hazardous Product application are linked via the Hazardous Product ID#. The equivalent pounds would then be multiplied by the chemical "% by weight" value entered in the Hazardous Product Chemical Component application. The resulting value in pounds represents the pounds on hand of a particular chemical.

The program performs these same basic conversions over all the containers entered in the container application for a given reporting period. During the process the program is also tracking the number of days on site, the maximum value on hand and the average daily amount on hand. The final figures are then broken down by storage area. This information is needed for Tier II reporting.

VOC emissions are calculated in much the same manner, except instead of using the density, the VOC pounds per gallon or the metric equivalent is used.

Screen Layouts

Each database development product lends a certain "look and feel" to the final program product. TEAM-UP is no exception. The default "style" of TEAM-UP generated applications consists of four elements: Menus, Applications, Reports and Utilities.

Menus allow the user to select other menus, applications, reports or utilities. Each menu contains options that the user can select. Each report within HMTS will have these report option numbers stamped in the upper right hand corner. This makes any correspondence about a particular report very easy. As long as the particular report option number is known, it is very easy for the programmer or other users of the system to acknowledge which report is in question. This logic also holds true for any option found on menus. As long as the option number is known, traceability is not a problem.

Applications will contain data. Each application will be made up of two main areas, the application screen and its corresponding one-liner screen. In short, the application screen will contain all the fields of the application. The user may search by every stored field in an application. The one-liner screen is a quick listing of the records contained within a particular application. The one-liner screen allows the user to quickly browse the records without having to look at all the data contained in every application. In general a CTRL key followed by a letter will be used to invoke all procedural language functions such as updates, enters, deletes, etc.

Reports can be generated in the same manner in which an application is called up. An option number is selected and the report will start running. In most cases, after the report is requested, the user will be prompted for a destination of the report: screen, file or printer. The default destination is to the screen. Although there are reports that do not have all three of these choices due to special circumstances, most reports have all three options. Some reports will prompt the user for falter data. In all cases, if the filter data is left blank, all records in the application will be processed unless additional filters have been chosen. Most reports can be aborted by hitting escape.

Utilities pertain to menu options that call imports: report design menus, system security, system configuration, programs outside of TEAM-UP, etc.

There is a complete TEAM-UP reference manual for HMTS provided in one of the appendices. It is highly recommended that the user refer to the appendices prior to using HMTS. Valuable searching and system configuration information is explained in detail.

Screen Graphics

High resolution graphics are not extensively used at this time. There are no modules in HMTS that would benefit from a graphic screen; however, possible development of an

MSDS scanning/image system will require a graphics interface package and a medium to high resolution monochrome or color screen. Any additional functionality requiring pie charts, X-Y graphs or red-time high resolution monitoring will necessitate the use of either an external graphics package or additional HMTS modules.

Keyboard Layout/System Help

As with the screen layout, the keyboard has a standard set of keys that work identically or similarly on any screen in HMTS. For example, hitting [HOME] followed by [F1] will show the standard keyboard functions. Application-specific help can be obtained by hitting [F1] in any field within an application. In all applications, if there are any special procedures that perform operations, the procedures will be invoked by pressing [CTRL] followed by the letter corresponding to the procedure. The corresponding letter will be found on the lower portion of the screen.

The intention of the ten-day test period was to test the user friendliness of HMTS and attempt to emulate a real world situation. In actuality, the ten-day test period lasted several months. It was determined during project development that the functional and integration testing which was performed during the test period would indeed have to be repeated many times as new releases of the software were completed. Consequently, the duration was expanded.

The functional and integration testing proved very helpful in identifying many of the errors in the system. The test plan allowed the alpha software to be put through the paces of a real world shipbuilding environment without going through a complete implementation phase where testing costs would be far higher.

The tenth day of the testing period has been included in the final report. Please see the tenth day reports for examples of how each report looks after ten days of information has been loaded into HMTS.

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0001 INSIDE PIPING

AREA: 0003 BUILDING 21 TOOL ROCH

CONT PRES TEMP CURRENT UNIT DATE LAST CONTS PRODE DESCRIPTION TYPE TYPE TYPE QUANTITY NECETAED CHANCE 75 P 01/03/91 01/03/91 000025 005028 HIL-P RED DYE

CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0002 OUTSIDE PIPING

AREA: 0012 WAREHOUSE 8 TOOL ROOM BIN 18

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

CONTE	PROOF	DESCRIPTION		PRES TYPE	TEMP TYPE	CURRENT		DATE RECEIVED	Last Change
000039	005017	2-PIENYLPHENOL, 99%	E	1	4	0	G	01/04/91	01/08/91

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0003 OUTSIDE HACH

AREA: 0001	PAINT D	EPAKDENT SHALL PAKTS NOON							
CONTE	17004	DESCRIPTION	CONT	PRES TYPE	TD# TYPE	CONSTITY	UNIT	DATE RECEIVED	LAST CHANGE
000036 AREA: 0004	005027 LAHINAT	INTERGARD EPOXY ING EAST SHOP FLOOR	r	1	4	20	,	01/04/91	01/04/91
COHTE	19001	DESCRIPTION	CONT TYPE	PRES TYPE	TOP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	LAST CHANCE
000005 AREA: 0015	005016 PIPE 5H	INTERZINC SILICATE RED BINDER OF WATER FRONT TOOL BOOTH	D	1	4	0	G	01/01/91	01/09/91
11/100	PRODE	DESCRIPTION	TY903	PRES TYPE	TEPP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVLO	
000090 AREA: 0018		124 ENNÆL, HABITABILITY COLORS BACK OFFICE	И	1	4	1092	0	01/09/91	01/09/91
CONTE	2R004	DESCRIPTION	TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	
000088 000089 AREA: 0020	005025	INTERZING SILICATE RED BINDER INTERCLENE RING SUPPLY SHELF 12	O H	1	4	536 1136		01/09/91 01/09/91	
CONTR	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	TOP TYPE	CURRENT QUANTITY	TINU	DATE RECEIVED	LAST CHANGE
000042	005021	ANTI-FOULING BOTTOM PAINT	 С	1	4	544	G	01/04/91	01/07/91

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

000012 005021 ANTI-FOULING BOTTOM PAINT

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G 01/02/91 01/02/91

CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0004 INSIDE HACH

NEA: 0002	BLAST B	DOTH .							
CONTR	2ROD2	DESCRIPTION	CONT TYPE	PRES TYPE		CURRENT CUNITITY		DATE RECEIVED	
REA: 0012	HAREHOU	2-PIENYLPHENOL, 99% ISE 8 TOOL ROOM BIN 18	С	1	4	104	0	01/10/91	01/10/9
		DESCRIPTION	CONT TYPE	PRES TYPE		CURRENT QUANTITY		DATE RECEIVED	
AREA: 0014	PIPE SE	Intergard epoxy EDP HAIN TOOL ROOM	В	1	4	1104	L	01/10/91	01/10/9
		DESCRIPTION	CORT TYPE	TYPE	TYPE	CURRENT CUNITITY		RECEIVED	CHANCE
AREA: 0018	RIGGING	INORGANIC GLASS BACK OFFICE	0			1002		01/05/91	
CONTE	PROD	DESCRIPTION	CONT	PRES TYPE	TEMP TYPE			DATE RECEIVED	

F 1 4

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0005 PAINTING

AREA: 0008 DIPPING BOOTE

CONTE	PRODE	DESCRIPTION	Cont Type	PRES TYPE	Ter Type	CURRENT QUANTITY	UNIT	DATE RECEIVED	LAST CHANCE
000059 REA: 001	005022 4 PIPE 5	124 ENMEL, HABITABILITY COLORS HOP HAIN TOOL BOOM	F	1	4	11	к	01/06/91	01/06/91
CONT	2R002	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	CATE RECEIVED	last Chance

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0006 INSULATING

AREA: 0002 BLAST BOOTH

сояπ≢	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	Temp Type	CURRENT CUNITITY	UNIT	DATE RECEIVED	last Change
000026 AREA: 0006		CCM 8361 CLEAR CROWN SILICATE TOOL ROCK	I	1	4	69	₽	01/03/91	01/08/91
сонтв	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	Temp Type	CURRENT CUANTITY	UNIT	DATE RECEIVED	last Change
000003	005016	INTERZINC SILICATE RED BINDER	К	1	4	80	P	01/01/91	01/01/91

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0007 CARPENTRY

AREA: 0001	PADIT	DEPARDENT SHALL PARTS NOOH							
CONTE	28004	DESCRIPTION				CURRENT QUANTITY		DATE RECEIVED	
		2-PHENYLPHENOL, 99% TING EAST SHOP FLOOR	С	2	4	493	G	01/01/91	01/03/9
CONTE	• • • • • • • • • • • • • • • • • • • •	DESCRIPTION		PRES TYPE	TEMP TYPE	CURRENT		DATE RECEIVED	
	005025 NATEHO	INTERCLENE USE 8 TOOL NOOM BIN 17	D	1	4	125	L	01/06/91	01/06/9
CONTE		DESCRIPTION	CONT TYPE	PRES TYPE		CURRENT QUANTITY	UNIT	DATE RECEIVED	
		NICKEL PLATED ABRASIVE PRODUCTS USE 8 TOOL ROOH BIN 18	ĸ	1	4	٥		01/01/91	01/01/9
CONT	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE		CURRENT QUANTITY		DATE RECEIVED	CHANGE
		PRI RECYCLED LACQUER THURNER HOP MATER FRONT TOOL BOOTH	Н	1	4	32150		01/07/91	
CONTE	PRODE	DESCRIPTION				CURRENT	UNIT	DATE RECZIVED	
		GENETRON 113 TRICHLONOFLOUNCETHANE TING SHOP CRIB	к	1	4	147	к	01/07/91	01/08/
CONT	PROOF	DESCRIPTION	COHT TYPE			CURRENT QUANTITY		DATE RECEIVED	
000064	005034	EASTMAN POLYESTER RED 2G DYE	н	1	4	50	Q	01/07/91	01/07/

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0008 ELECTRICAL

CONTS	PROOF	DESCRIPTION	CONT	TYPE	TEMP TYPE	CURRENT	UNIT	NECE I VED	
000007 REA: 0003		GENETRON 113 TRICILLOROFLOUROETHANE KS 21 TOOL ROOM	к	1	4	0	P	01/01/91	01/09/91
CONTE	PROOF	DESCRIPTION	CONT TYPE	PRES TYPE		CURRENT QUANTITY		DATE RECEIVED	CHANGE
	HAREHOU	EASTMAN POLYESTER RED 2G DYE USE 8 TOOL ROOM BIN 16	0	1	4	427		01/05/91	
CONTE		DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY		DATE RECEIVED	
000043 REA: 0015		INTERZINC SILICATE RED BINDER HOP WATER FRONT TOOL BOOTH	1	1	4	0	P	01/05/91	01/07/9
CONTE	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	
000046 REA: 0018		INTERZING SILICATE RED BINDER	D	1	4	52	3	01/05/91	01/05/9
сонта	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	Ter e Type	CURRENT QUANTITY	UNIT	DATE RECEIVED	
000067	005023	GENTEX TO-60	λ	1	6	350	o	01/07/91	01/07/9

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0009 HELDING

AREA: 0001 PAINT DEPARTMENT SHALL PARTS ROOM

CONTR	13001	DESCRIPTION	CONT TYPE	PRES TYPE	TIME TYPE	CURRENT CURRENT	UNIT	DATE NECEIVED	Last Chance
000020 AREA: 0002	005024 BLAST	PBI RECYCLED LACQUER THIRRER BOOTH	E	1	4	0	G	01/02/91	01/03/91
CONTE	18001	DESCRIPTION	CONT TYPE	PAES TYPE	TD P TYPE	CURRENT	UNIT	DATE RECEIVED	LAST CHANCE
000019 AREA: 0022	005020 PAINT	INDECANIC GLASS TEST AREA	к	1	4	٥	٠,	01/02/91	01/02/91
CONTR	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	TD# TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	LAST CHANGE
000016	005015	NICKEL PLATED ABRASIVE PRODUCTS	D	1	4	124	P	01/02/91	01/10/91

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0010 HULL

CONTE	PRODE	DESCRIPTION	CONT	PRES	TEMP	CURRENT	UNIT	DATE RECEIVED	
			D			50			
		ACUA DIMAND COCLANT ASSURANCE LAB	U	•	•	30	٠	01/01/91	01/01/3
CONT	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE		CURRENT QUANTITY		rate Received	CHANGE
000075 AREA: 0008		INTERPLATE RED FERNO/ZINC SILICATE BOOTH	E	1	4	93		01/08/91	
CONT	PROOF	DESCRIPTION	CONT TYPE	PRES TYPE		CURRENT	UNIT	DATE RECEIVED	
		AQUA DIAYOND COCIANT SE 8 TOOL ROOM BIN 17	N	1	4	11	0	01/06/91	01/06/9
CONTE	PRODI	DESCRIPTION	CONT TYPE		TYPE	CURRENT CUNITITY		DATE RECEIVED	
000084	005018	AGUA DIAMOND COCIANT GENETRON 113 TRICHLOROFLOUROETHWIE SE 8 TOOL ROCH BIN 22	1	1	5		к	01/09/91 01/09/91	
CONTI	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE		CURRENT QUANTITY		DATE RECEIVED	
		INTERCLENE RING SUPPLY SHELF 17	Г	1	4	1023	R	01/07/91	01/07/
CONT	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY		date Received	CHANGE
000086 AREA: 0022		HIL-P RED DYE EST AREA	к	1	5	36		01/09/91	
CONTI	PRODE	DESCRIPTION				CURRENT QUANTITY	UNIT	date Received	
000018	005022	124 ENAMEL, HABITABILITY COLORS	D	2	4	0	P	01/02/91	01/09/9

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CONTAINERS BY DEPARTMENT AND AREA

		······································							
CONTE	21001	DESCRIPTION	CONT TYPE	PRES TYPE	TD T TYPE	CUNNENT	UNIT	DATE RECEIVED	LAST CHAKE
600028	005018	CENETRON 113 TRICHLONOFLOURGETHANE	L	1	4	0		01/03/91	01/03/91
000024	005027	INTERGARD EPOXY	D	2	4	0	L	01/03/91	01/05/91
000033	005034	EASTMAN POLYESTER RED 2G DYE	F	1	4	0	G	01/04/91	01/06/91
000074 AREA: 0002	005024 BLAST E	PRI RECYCLED LACQUER THIRRER	н	1	4	10	Q	01/08/91	01/08/9
CONTE	PRODE	DESCRIPTION	CONT	PRES	TDIP	CURRENT	UNIT	DATE	LAST
			TYPE	TYPE	TYPE	CONVELLEX		RECEIVED	CHANCE
000034	005028	HIL-P RED DYE	r	1	4	0	G	01/04/91	01/04/91
000006	005017	2-PHENYLPHENOL, 994	D	1	4	144	G	01/01/91	01/09/9
AREA: 0005	MAIN TO	OL ROCH							
CONTE	PROOF	DESCRIPTION	CONT	PRES	TDP	CURRENT	UNIT	DATE	LAST
			TYPE	TYPE	TYPE	CONNILLA		RECEIVED	
000023	005027	INTERGARD EPOXY	D	2	4	0	ı.	01/03/91	01/06/9
AREA: 0008	DIPPING	: BOOTH							
CONT	PROOF	DESCRIPTION	CONT	PRES	TEMP	CURRENT	UHIT		last
			TYPE	TYPE	TYPE	CONSTILLA		RECEIVED	CHANCE
000021	005025	INTERCLENE	В	1	4	290	P	01/03/91	01/10/9
AREA: 0011	NAKEHDO	SE 8 TOOL BOOM BIN 17							
CONT	PROOF	DESCRIPTION	CONT	PRES	TOP	CURRENT	UNIT	DATE	LAST
			TYPE	TYPE	TYPE	CONTILLA		RECEIVED	CHANCE
000027	005029	COM 8361 CLEAR CHONN SILICATE	J	1	4	0	٥	01/03/91	01/03/9
AREA: 0014	PIPE SH	DP HAIN TOOL ROOM							
CONTE	1004	DESCRIPTION	CONT	PRES	TDM	CURRENT	UNIT	DATE	LAST
			TYPE	TYPE	TYPE	COMMITTY		MECETVED	CHANCE
000032	005033	ACETYLDIE	L	2	4	20	P	01/04/91	01/09/9
AREA: 0015	PIPE SH	OP MATER FRONT TOOL BOOTH							
CONTR	PROOF	DESCRIPTION	CONT	PRES	TEN	CURRENT	UNIT	DATE	LAST
		44	JYFE	TYPE	TYPE	YTITHKUD		RECEIVED	CHANCE
000031	005018	GENETRON 113 TRICHLOROFLOUROETHANE	н	1	4	0	P	01/04/91	01/08/9
WEA: 0016	INSULAT	ING SHOP CRIS							
CONTR	PRODE	DESCRIPTION	CONT	PRES	TOT	CURRENT	UNIT	DATE	LAST

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CONTAINERS BY DEPARTMENT AND AREA

000029 005021 AMTI-FOULING BOTTOM PAINT F 1 4 0 G 01/03/91 01/08/91

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0012 BLASTING

AREA: 0002 BLAST BOOTH

CONTR	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	LAST CHANGE
000038 AREA: 0011	005030 MAREHO	POTASH SCOALINE ZINC SILICATE USE 8 TOOL NOON BIN 17	к	1	4	0	p	01/04/91	01/04/91
CONTE	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	TEHR TYPE	CURRENT CUANTITY	UNIT	DATE RECEIVED	LAST CHANCE
000015	005024	PBI RECYCLED LACQUER THINNER	λ	1	4	0	G	01/02/91	01/02/91
000073	005026	HD8733	E	1	4	12	L	01/08/91	01/08/91
AREA: 0021	DIGINE	ERING SUPPLY SHELF 17							
CONTE	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT CUNITITY	UNIT	DATE RECEIVED	LAST CHANGE
000011	005020	INORGANIC CLASS	к	1	4	0	,	01/02/91	01/10/91

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0013 QUALITY ASSURE.

AREA: 0001	PAINT I	DEPARTMENT SMALL PARTS ROOM								
CONTR	PRODE	DESCRIPTION		CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT CUNNTITY	UNIT	DATE RECEIVED	
000041 REA: 0012	005026 WAREHO	MD8733 USE 8 TOOL ROOM BIN 18		н	1	4	0	P	01/04/91	01/05/91
CONTE	PRODI	DESCRIPTION		CORIT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	LAST CHAKE
000013 000077 REA: 0016		124 ENMEL, HABITABILITY COLORS EASTMAN POLYESTER RED 2G DYE TING SHOP CRIB	•	ĸ	1	4	43 560		01/02/91 01/08/91	
CONTE	PRODA	DESCRIPTION		CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	last Change
000087 AREA: 0026	005031 HULL 5	INTERPLATE RED FERRO/ZINC SILICATE 5 BELOW DECK CANG BOX		В	2	4	1136	G	01/09/91	01/09/9
CONTE	PRODE	DESCRIPTION		CONT	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	LAST CHANCE
000080	005016	INTERZINC SILICATE RED BINDER		J	1	4	85	P	01/08/91	01/08/9

000050 005029 CCH 8361 CLEAR CROWN SILICATE

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0 P 01/05/91 01/07/91

CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0014 INDUSTRIAL ENCR

AREA: 0002	DLAST	BOOTH							
CONTE	2004	DESCRIPTION	CONT		TOP TYPE	CURRENT QUANTITY	UNIT	DATE. RECEIVED	LAST CHANCE
000048 AREA: 0010		CENTEX TC-60 USE 8 TOOL ROOM BIN 16	н	1	1	404	P	01/05/91	01/10/9
CONTE	PRODE	DESCRIPTION	CONT	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE NECE IVED	
000049 AREA: 0013		GENTEX TC-60 USE \$ TOOL ROOM BIN 22	Σ	2	4	45	1	01/05/91	01/05/9
CONTE	PRO0#	DESCRIPTION	CONT	PRES TYPE	TO# TYPL	CURRENT QUANTITY	UNIT	DATE RECEIVED	LAST CHANCE
000099 AREA: 0014		CENTEX TO-60	r	1	4	24	٥	01/10/91	01/10/9
CONTE	PRODA	DESCRIPTION	CONT	PRES TYPE	TOP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	LAST CHANCE
000100	005024	POTASH SCOALINE ZING SILICATE PBI RECYCLED LACQUER THINNER NE STATION NUMBER 1	ĸ	1	4	60 1414		01/08/91 01/10/91	
CONTE	PRODI	DESCRIPTION	CONT	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	LAST CHANGE
		POTASH SCOALINE ZINC SILICATE 006 AFT DECK BINS	F	1	4	52	0	01/10/91	01/10/9
CONTE	1001	DESCRIPTION	CONT	PRES TYPE	TD# TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	last Chance

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0015 ENGINEERING

CONTS	PRODI	DESCRIPTION	CONT TYPE	PAES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	Last Chance
		CENETRON 113 TRICHLOROFLOURGETHANE 124 EMMEL, HABITABILITY COLORS 3 TOOL ROCH	C F	2	4	0 15		01/01/91 01/04/91	
CONTE	PROOF	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT CUNNTITY	UNIT	date Received	last Change
000014 AREA: 0024	005023 HULL 0	GENTEX TC-60 GENTEX TC-60	D	1	4	505	P	01/02/91	01/02/91
CONTE	PROOF	DESCRIPTION	CONT TYPE	PRES TYPE	TIMP TYPE	CURRENT CUNNTITY	UNIT	DATE RECEIVED	LAST CIUNCE
000051	005026	HD6733	1	1	4	46	P	01/06/91	01/07/91

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0016 HANAGEHENT THEO

AREA: 0007 QUALITY ASSURANCE LAB

CONTR	PRODI	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	CHWACE TYRE
000052 AREA: 001	005028 5 PIPE 5	HIL-P RED DYE HOP WATER FRONT TOOL BOOTH	х	1	4	125	P	01/06/91	01/06/91
CONTA	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	THP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	last Change
000068 000071 AREA: 001	005020 005029 8 RIGGDS	INDIGANIC GLASS COM 8361 CLEAR CROWN SILICATE G BACK OFFICE	A F	1	4	326535 216	•	01/07/91 01/08/91	
CONTE	PRODE	DESCRIPTION	CONT	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	date Received	LAST CHANCE
000053	005015	NICHEL PLATED ABRASIVE PRODUCTS	0	1	4	2325	P	01/06/91	01/06/91

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0017 PLANNING

AREA: 000	7 QUALIT	Y ASSURANCE LAB							
CONTE	PROD	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT CUNNTITY	TINU	DATE RECEIVED	LAST CHANCE
000054 AREA: 002	005024 2 PAINT	PBI RECYCLED LACQUER THIRNER TEST AREA	D	1	4	325	G	01/06/91	01/06/91
CONTE	PRODI	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT CURRENT	UNIT	DATE RECEIVED	LAST CHANCE
000044	005031	INTERPLATE RED FERRO/ZINC SILICATE	Q	2	4	1324	P	01/05/91	01/07/91

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0019 TABRICATION

AREA: 0004 LAHINATING EAST SHOP FLOOR

CONTI	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	TIME TYPE	CURRENT CURRENT	UNIT	DATE RECEIVED	CHANGE
000017 AREA: 0008		GENETRON 113 TRICHLOROFLOUROETHUNE BOOTH	D	2	4	0	,	01/02/91	01/10/91
CONTI	PRO04	DESCRIPTION	CONT TYPE	PRES TYPE	TD# TYPE	CUNNENT QUANTITY	TINU	DATE RECEIVED	LAST CHANCE
000060	005034	EASTMAN POLYESTER RED 2G DYE	г	1	4	1065	R	01/06/91	01/06/91

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0020 ACCOUNTING

AREA: 0013 WAREHOUSE 8 TOOL ROOM BIN 22

CONTA	78007	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	last Chance
000083 AREA: 002	005022 2 PAINT	124 ENHEL, HABITABILITY COLORS TEST AREA	Ε	1	4	35	ı	01/09/91	01/09/91
CONTR	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	LAST CHANGE
000082	005019	AQUA DIAHDHD COOLANT	Ε	1	4	165	G	01/09/91	01/09/91

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0022 DIPPING

AREA: 0007 QUALITY ASSURANCE LAS CONTS PRODS DESCRIPTION CONT PRES TEM CURRENT UNIT DATE LAST TYPE TYPE TYPE QUANTITY RECEIVED CHANCE K 1 4 0 9 01/04/91 01/08/91 000037 005026 HD8733 AREA: 0020 ENGINEERING SUPPLY SHELF 12 CONTA PRODE DESCRIPTION CONT PRES TEMP CURRENT UNIT DATE LAST TYPE TYPE TYPE QUANTITY RECEIVED CHANGE 000030 005015 NICKEL PLATED ABRASIVE PRODUCTS P 01/03/91 01/06/91 Q 1 5 1319 AREA: 0021 ENGINEERING SUPPLY SHELF 17 CONTA PRODE DESCRIPTION CONT PRES TEMP CURRENT UNIT DATE LAST TYPE TYPE TYPE QUANTITY NECETIVED CHANGE 000072 005016 INTERZING SILICATE RED BINDER Q 01/08/91 01/08/91 AREA: 0022 PAINT TEST AREA CONTR PRODE DESCRIPTION CONT PRES TEMP CURRENT UNIT DATE LAST TYPE TYPE TYPE QUANTITY NECEIVED CHANGE 000078 005034 EASTHAN POLYESTER RED 2G DYE F 1 4 2 P 01/08/91 01/08/91 TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM REPORT DATE: 01/14/92 REPORT#: 61

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0023 QUALITY CIRCLES

REA: 0001	PAINT	DEPARTMENT SMALL PARTS ROOM	·						
CONTE	PROD#	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	LAST CHANGE
000079 NEA: 0022	005027 PAINT	Intergard epoxy Test area	o	1	4	738	P	01/08/91	01/10/91
CONTE	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE. RECEIVED	LAST CHANCE
000081	005021	ANTI-FOULING BOTTOM PAINT	E	1	4	185		01/09/91	01/09/91

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0024 WAREHOUSE

AREA: 000	aniroi	NG 21 TOOL NOOM							
CONTE	18001	DESCRIPTION	CONT TYPE	PRES TYPE	TOR TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	LAST CRANCE
000098	005015	NICKEL PLATED ABRASIVE PRODUCTS	F	1	4	4		01/10/91	01/10/91
000097	005032	INTERLAC BLACK ALKYD ENMEL	c	2	5	304	T	01/10/91	01/10/91
AREA: 001:	NAREHO	USE 8 TOOL BOOH BIN 22							
CONTI	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	LAST CHANCE
000022	005026	H00733	λ	2	4	300	,	01/03/91	01/05/91
000092	005034	EASTHAN POLYESTER RED 2G DYE	£	1	4	12	G	01/10/91	01/10/91
000091	005024	PBI RECYCLED LACQUER THINNER	E	1	4	92	P	01/10/91	01/10/91
AREA: 001:	GA30LI	NE STATION NUMBER 1							
CONTE	PROOF	DESCRIPTION	CONT	PRES TYPE	TD P TYPE	CURRENT CUMITITY	UNIT	DATE RECEIVED	last Charge
000094	005020	INORGANIC GLASS	г	1	4	104	R	01/10/91	01/10/9

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0025 FIBERGIASS

AREA: 0005 HAIN TOOL ROOM

CONT	2R008	DESCRIPTION	CONT TYPE	PRES TYPE	TDAP TYPE	CURRENT YTTTWUD	TINU	DATE NECEIVED	LAST CHANGE
000002 AREA: 002	005015 HULL 0	HICKEL PLATED ABRASIVE PRODUCTS DOG AFT DECK BIRS	D	1	4	29	G	01/01/91	01/09/91
CONTI	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	TINU	DATE RECEIVED	LAST CHAKE
000086	~~~~	INTERNITY DED FERDATING STITCHTS		1		1125	0	01/06/91	01/06/91

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0026 CLEANING

AREA: 0005 HATH TOOL NOOM

CONTE	PROOF	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	LAST CRANCE
000069 AREA: 0025		ANTI-FOULING BOTTOM PAINT 007 APT DECK BINS	F	1	4	2	G	01/07/91	01/07/91
CONTA	PRODA	DESCRIPTION	CONT TYPE	PRES TYPE	TD# TYPE	CURRENT CUANTITY	UNIT	DATE RECEIVED	LAST CHANGE
000070	005022	TATELLY BLAY HAS FUND		```		16		01/02/01	01/07/91

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CONTAINERS BY DEPARTMENT AND AREA

DEPT: 0027 PURCHASING

AREA: 0024 HULL 0006 AFT DECK BINS

CONTE	PRODE	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	last Change
000063 AREA: 0027		2-PIENYLPHENOL, 99% C DRYDOCK	н	1	4	100	T	01/07/91	01/07/91
CONT	PROD#	DESCRIPTION	CONT TYPE	PRES TYPE	TEMP TYPE	CURRENT	UNIT	DATE RECEIVED	IAST CHANGE
000035	005029	CAN 8361 CLESS COOM STITUTE	·	,		43		01/04/91	01/06/91

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AREA: 000	1 PAINT	DEPARTMENT SHALL PARTS NOOH							
CONTE	PR001	DESCRIPTION	CONT TYPE	PRES TYPE	TOP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	LAST CHANGE
000001 AREA: 001	005012 NAREHO	BARIUIH COHPOUNDS USE 8 TOOL NOOH BIN 16	r	1	4	90	2	01/01/91	01/01/92
CONT	28003	DESCRIPTION	CORT TYPE	PRES TYPE	TEMP TYPE	CURRENT QUANTITY	UNIT	DATE RECEIVED	LAST CHANCE
000062	005033	ACETYLENE	L	2	5	100	L	01/07/91	01/07/91

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NCV/USED DATE	CONTE	PRODE	PRODUCT DESCRIPTION	DPL4/	NAME	LBS RCVD	LBS USEC
01/01/91	000001			1	ACDISON, BARBARA	0.0000	10.0000
01/01/91	000001					100,0000	0.0000
01/03/91	000001			_	BELANGERJANES	0.0000	0.0000
01/05/91	000001			1	ADDISONBARBARA	0.0000	0.0000
01/05/91	000001			1	ADD 1908BARBARA	0.0000	0.0000
					CURRENT CONT GTY/UNIT:	90 P	90
01/01/91						123.2200	0.0000
01/01/91					BELANGER, JAMES	0.0000	5.000
01/09/91	000003				EASTVIEW, CRAIG	0.0000	100.000
				•	CURRENT COXIT QTY/UNIT:	29 G	18
01/01/91						100.0000	0,000
01/01/91	000003			1	DAVIELS, JERONE	0.0000	20.000
					CURRENT CONT QTY/UNIT:	80 P	80
01/01/91						4400.0000	0.000
01/01/91					GENTHE, ROBERT	0,000	10.000
01/03/91	000004			11	KAISER, STEPHEN	0.0000	50.000
					CURRENT CONT GTY/UNIT:	493 G	4340
01/01/91	000005					500.0000	0.000
01/01/91	000005			7	GENTHE, ROBERT	0.0000	12.000
01/09/91	000005			9	ISAACSEN, SHERRY	0.0000	488.000
					CURRENT CONT GTY/UNIT:	0 G	0
01/01/91	000006					1320.0000	0.000
01/01/91	000006			9	ISAACSEN, SHERRY	0.0000	34.000
01/09/91	000006	_			HOFFMANN, CARL	0.0000	22.000
					CURRENT CONT QTY/UNIT:	144 G	1264
01/01/91	000007					50.0000	0.000
01/01/91	000007			13	HOON, GERALD	0.0000	10.000
01/04/91	000007			15	OLSON, MERHIN	0.0000	4.600
01/09/91	000007			17	QUINN, SARA	0.0000	35.400
					CURRENT CONT OTY/UNIT:	0 P	٥
01/01/91						71.5000	0.000
01/01/91	000008			15	OLSON, MERWIN	0.0000	6.500
					CURRENT CONT QTY/UNIT:	50 G	65
						10.0000	0.000

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CONTAINERS HISTORY FROM: 01/01/91 TO 01/31/91

RCV/USED DATE	CONTE	PRODE	PRODUCT DESCRIPTION	D&T4\/MAE		QUANTITY LBS RCVD	QUANTITY LBS USED
01/01/91	000009			14	ноонан, знам	0.0000	10,0000
					CURRENT CONT GTY/UNIT:	0.1	0 P
01/01/91 01/01/91				15	OLSON, MERHIN	1150.0000 0.0000	0.0000 1150.0000
					CURRENT CONT QTY/UNIT:	0 G	0 1
01/02/91						100.0000	0.0000
01/02/91					ISAACSEN, SHERRY	0.0000	12.0000
01/10/91	000011			15	OLSON, HERNIN	0.0000	88.0000
					CURRENT CONT CITY/UNIT:	0 P	0 P
01/02/91	000012					500.0000	0.0000
					CURRENT CONT QTY/UNIT:	50 G	500 P
01/02/01	000013	000014	SULFURIC ACID			610,0000	0.0000
01/02/91		WW14	SOIS ORIGINALID	12	LOEFFELHOLZ, HOHARD	0.000	80.0000
					CURRENT CONT GTY/UNIT:	43 G	530 P
01/02/91	000014			,	CABINETREE, SHANTHA	0.0000	45.0000
01/02/91				-		550.0000	0.0000
					CURRENT CONT GTY/UNIT:	505 P	505 P
				_			
01/02/91				7	GENTIE, ROBERT	0.0000 4.5650	4.5650 0.0000
01/02/91	000012					4,3630	0.0000
					CURRENT CONT GTY/UNIT:	0 G	0 P
01/02/91	000016					200.0000	0.0000
01/03/91	000016			2	BELANCER, JAMES	0.0000	3.2555
01/03/91	000016			2	BELANGERJHES	0.0000	0.0000
U)/06/91				2	BELLNIGER, JAMES	0.0000	0.1387
₹1/07/91					LOEFFELHOLZ, HOWARD	0.0000	2.3104
03/09/91					DNIELS, JEROFE	0.0000	0.4621
	000016		MAN SPECIAL SOLVENT		EASTVIEN, CRAIG	0.0000	62.0000
다. 12					CURRENT CONT OTY/UNIT:	124 P	124 P
	000017					80.0000	0.0000
1/04/91	000017			3	CABINETREE, SMANTHA	0.0000	20.0000
, 201/07/91	000017				PINK, 19RY	0.0000	6.3250
₹1\10\21	000017		-,	14	HOONAN, SEAM	0.000	53.6750
					CURRENT CONT GTY/UNIT:	0 P	0 2

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RCV/USED DATE	CONTI	PRODI	PRODUCT DESCRIPTION	DPLI/	NAME.	QUANTITY LBS RCVD	CUNITITY LBS USED
01/02/91	000018					180.0000	0.0000
		000014	SULFURIC ACID	7	GENTHE, ROBERT	0.0000	32.0000
01/05/91					QUINN, SARA	0.0000	12.0000
01/06/91					DANIELS, JEROME	0.0000	8.2500
01/09/91	000018			8	HOFFHANN, CARL	0.0000	127.7500
					CURRENT CONT CITY/UNIT:	0 P	0 1
01/02/91						175.0000	0.0000
01/02/91	000019				EASTVIEN, CRAIG	0.0000	0.5538
01/02/91	000019				GENTHE, ROBERT	0.0000	174.4462
					CURRENT CONT QTY/UNIT:	0 P	0 1
01/02/91	000020					0.8715	0.0000
01/03/91	000020			2	BELLNICER, JAMES	0.0000	0.8715
					CURRENT CONT GTY/UNIT:	0 G	0 1
01/03/91						300.0000	0.0000
01/03/91					ADDISON, BARBARA	0.0000	10.6000
01/10/91	000021			15	OLSON, MERNIN	0.0000	0.2595
					CURRENT CONT QTY/UNIT:	290 P	290
01/03/91	000022					320,0000	0.0000
01/05/91				9	ISANCSEN, SHERRY	0.0000	20.0000
					CURRENT CONT CIY/UNIT:	300 P	300
01/03/91						179,6560	0.0000
01/03/91					NOFFINN, CARL	0.0000	10.0000
01/06/91	000023				GENTIE, ROBERT	0.0000	169.6560
					CURRENT CONT QTY/UNIT:	0 L	0 :
01/03/91	000024					179,6560	0.0000
01/05/91	000024			11	KAISER, STEPHEN	0.0000	179.6560
					CURRENT CONT GTY/UNIT:	0 L	0
01/03/91	000025					75.0000	0.0000
					CURRENT CONT GTY/UNIT:	75 P	75 1
01/03/91	000026					179,0000	0.0000
01/04/91	000026			5	EASTVIEN, CRAIG	0.0000	10.6000
01/08/91	000026			9	ISAACSEN, SHERRY	0.0000	100.0000

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CONTAINERS HISTORY FROM: 01/01/91 TO 01/31/91

QUANTITY 185 USED	CONNILLA CONNILLA	WE.	EPLI/	PRODUCT DESCRIPTION	14001	CONTE	RCV/USED DATE
69	69 P	CURNENT CONT QTY/UNIT:					
0.0000	8.0625					000027	01/03/91
8.0625	0.0000	DANIELS, JEROME	4			000027	01/03/91
0	0 0	CURRENT CONT GTY/UNIT:					
0.0000	100.0000					000028	01/03/91
100.0000	0.0000	ISAACSEN, SHERRY	<u>,</u>			000028	01/03/91
0	0.8	CURRENT CONT GTY/UNIT:					
0.0000	200.0000						01/03/91
200.0000	0.0000	NOOHAH, SHAM	14	SH SOLVENT	000075	000029	01/04/91
0	0 G	CURRENT CONT GTY/UNIT:					
0.0000	1320.0000					000030	01/03/91
0.7701	0.0000	CENTRE, ROBERT	7			000030	01/06/91
1319	1319 2	CURRENT CONT GTY/UNIT:					
0.0000	20.0000					000031	01/04/91
5.0000	0.0000	LOEFFELHOLZ, HOHARD					01/04/91
15.0000	0.0000	HOOH, GERALD	13		_	000031	01/08/91
0	0 P	CURRENT CONT QTY/UNIT:					
0.0000	120.0000					000032	01/04/91
100.0000	0.0000	FERNER, HICHAEL	6			000032	01/09/91
20	20 P	CURRENT CONT QTY/UNIT:					
0.0000	242.3600					000033	01/04/91
242.3600	0.0000	DANIELS, JEROME	4			000033	01/06/91
0	0 G	CURRENT CONT QTY/UNIT:					
0.0000	11.0000					000034	01/04/91
11.0000	0.0000	MOON, GERALD	13			000034	01/04/91 01/04/ 9 1
0	0 G	CURRENT CONT GTY/UNIT:					
0.0000	56,0000					000035	01/04/91
22.0000	0.0000	LOEFFELHOLZ, HOWARD	12		_	000035	01/06/91
34	43 G	CUNUENT CONT QTY/UNIT:					01/04/91 01/06/91 01/04/91
0.0000	20.0000					000036	01/04/91

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TITY QUANTIT RCVO LBS USE	QUANTITY LBS RCVD	w.e	DEU/	PRODUCT DESCRIPTION	CONTA PRO	KCV/USED NATE
P 20	20 P	CURRENT CONT QTY/UNIT:				
0000 17.500	0.0000	LOEFFELHOLZ, HOHARD	12		000037	01/05/91
0000 102.500	0.0000	DANIELS, JEROME	4			1/08/91
P 0	0 P	CURRENT CONT QTY/UNIT:				
0000 0.000	120.0000				000038	01/04/91
0000 0.000	10.0000				000038	1/04/91
	0.0000	JACKSON, BELINDA	10		000038	1/04/91
0000 4.000	0.0000	LOEFFELHOLZ, HOWARD	12		000038	01/04/91
P 0	0 P	CURRENT CONT CTY/UNIT:				
0000 0.000	968.0000	•			000039	01/04/91
0000 10.000	0.0000	BELANGER, JAMES	2		000039	1/06/91
0000 958.000	0.0000	MOON, GERALD	13		000039	1/08/91
G 0	0 G	CURRENT CONT CITY/UNIT:				
0000 0.000	183.0000				000040	1/04/91
	15 G	CURRENT CONT OTY/UNIT:				
0000 0.000	45.0000				000041	1/04/91
0000 30.000	0.0000	DANIELS, JEROME	4	O GENETRON 113 TRICHLOROTRIFLUOROETHANE	000041 000	1/05/91
0000 15.000	0.0000	OLSON, HERMIN	15		000041	1/05/91
P 0	0 P	CURRENT CONT GTY/UNIT:				
0000 0.000	5450.0000				000042	01/04/91
	0.0000	EASTVIEW, CRAIG	5			01/07/91
	544 G	CURRENT CONT OTY/UNIT:				
0000 0.000	32.0000				000043	01/05/91
0000 32.000	0.0000	GINTHE, ROBERT	7		000043	1/07/91
) P 0	0 P	CURRENT CONT OTY/UNIT:				
0000 0.000	1332.0000				000044	01/05/91
0000 8.000	0.0000	DANIELS, JERONE	4		000044	1/07/91
P 1324	1324 P	CURRENT CONT OTY/UNIT:				
	432.0000				000045	01/05/91
0000 5.000	0.0000	BELANGER, JAMES	2		000045	01/05/91
P 427	427 P	CURRENT CONT OTY/UNIT:				

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CONTAINERS HISTORY FROM: 01/01/91 TO 01/31/91

DATE	CONTE	PRODE	PRODUCT DESCRIPTION	EMPLA/NAME		QUANTITY LBS RCVD	QUANTITY LBS USED
01/05/91	000046			<u></u>		52,0000	0.0000
			······································	·	CURRENT CONT CTY/UNIT:	52 P	52 P
01/05/91	000047					1002,0000	0.0000
			·	<u> </u>	CURRENT CONT GIY/UNIT:	1002 P	1002 P
01/05/91	000048					405,0000	0.0000
01/10/91				6 FINNER,	MICHAFI.	0.0000	1.0120
01/10/51	400015			· 15,127	CURRENT CONT GTY/UNIT:	404 P	404 P
01/05/91	000040				CONCERT CONT. VILLY UNITE	45,0000	0.0000
01/05/91	000045	_		····	CURRENT CONT GTY/UNIT:	45 P	45 P
					CORREST COST OFFICE	43 F	43.5
01/05/91	000050					25,0000	0.0000
01/07/91	000050			3 CABINETR	ee, smantiia	0.0000	25.0000
					CLEURENT CONT QTY/UNIT:	0 2	0 }
	*****					100,0000	0.0000
01/06/91				9 15AACSER	. SIERRY	0.0000	54.0625
0.,0.,,					CURRENT CONT CITY/UNIT:	46 P	46 2
01/06/91	000052					125,0000	0,0000
		_	····				
					CURRENT CONT GIY/UNIT:	125 P	125 P
01/06/91	000053					2325.0000	0.0000
					CURULENT CONT QTY/UNIT:	2325 2	2325 2
01/06/91	000054					2.6975	0.0000
耳		_			CURRENT CONT GTY/UNIT:	325 G	3 1
N 21/06/91	000055					22.8500	0.0000
n H		-			CURRENT CONT QTY/UNIT:	125 L	23 1
01/06/91 01/06/91	000056	000055	INTERZINC			1125.0000	0.0000
^턴					CURRENT CONT GTY/UNIT:	1125 Q	1125 1
01/06/91	000057					5.2500	0.0000
•		_			CURRENT CONT GTY/UNIT:	11.7	5 1

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ACV/USED DATE	CONTI	PRODE	PRODUCT DESCRIPTION	erli/nwe	QUANTIT LBS RCV	-
01/06/91	000058				0.656	3 0.0000
		-		CURRENT CONT	QTY/UNIT: 11 O	1 P
01/06/91	000059				23.100	0.0000
		-		CURRENT CONT	QIY/UNIT: 11 K	23 P
16/90/10	000060				2.343	7 0.0000
		-		CURRENT CONT	QTY/UNIT: 1065 R	2 P
01/07/91	000061				2.250	6 0.0000
		-		CURRENT CONT	QTY/UNIT: 1023 R	2 P
1/07/91	000062				1996.300	0.0000
		_		CURRENT CONT	QTY/UNIT: 100 L	1996 P
1/07/91	000063	_			110.000	0.0000
		_		CURRENT CONT	QTY/UNIT: 100 T	110 P
1/07/91	000064	_			302.950	0.0000
				CURRENT CONT	QTY/UNIT: 50 Q	303 P
01/07/91 01/0 8/9 1				12 LOEFFELHOLZ, HOWARD	330.000 0.000	
				CURRENT CONT	GTY/UNIT: 147 K	323 1
01/07/91	000066				266,845	0.0000
		•		CURRENT CONT	QTY/UNIT: 32150 G	267 1
01/07/91	000067				1330,000	0.0000
		-		CURRENT CONT	QTY/UNIT: 350 Q	1330 [
01/07/91	830000				718,376	3 0.0000
		-		CURRENT CONT	QTY/UNIT: 326535 R	718 9
01/07/91	000069				17.000	0.0000
		-		CURRENT CONT	GIA/ANIL: 5 C	17 8

RCV/USED CONTR PRODE PRODUCT DESCRIPTION

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QUANTITY QUANTITY

CONTAINERS HISTORY FROM: 01/01/91 TO 01/31/91

DEM/WE

DATE	CONTE	FREE	PRODUCT DESCRIPTION	ини/ка			188 ACVD	LBS USED
01/07/91	000070						34.5400	0.0000
						CURULENT CONT QTY/UNIT:	16 G	35 1
01/08/91	000071	000050	CENETRON 113 TRICHLOROTRIFLUOROETHANE				1725.6000	0.0000
						CURRENT CONT QTY/UNIT:	216 G	1726 1
01/08/91	000072						99.4400	0.0000
						CURRENT CONT GTY/UNIT:	45 Q	99 1
01/08/91	000073				~		2688.1822	0.0000
						CURUNENT CONT CITY/UNIT:	12 L	2648 1
01/08/91	000074		······				0.0214	0.0000
						CURRENT CONT QTY/UNIT:	10 Q	0 1
01/00/91	000075						110.2000	0.0000
01/00/91				21 UI	MAN, PA	TRICIA	0.0000	10.0000
01/10/91	000075			3 0	MINETRE	e, smaitha	0.0000	7.0000
						CURRENT CONT GTY/UNIT:	93 Q	93 P
01/08/91	000076	000075	SH SOLVENT				132.4400	0.0000
						CURRENT CONT OTY/UNIT:	60 K	132 P
01/08/91	000077						1232.4400	0.0000
						CURRENT CONT QTY/UNIT:	560 K	1232 7
01/08/91	000078						2.2000	0.0000
т!						CURRENT CONT CITY/UNIT:	2 2	2 7
H 1/08/91	000079						800,0000	0.0000
A1/10/91	000079	000075	SM SOLVENT	9 15	BAACSEH,	SHERRY	0.0000	62.0000
ផ្ល						CURRENT CONT QTY/UNIT:	738 P	738 P
∑1/08/91	000080						85.0000	0.0000
ਰ }						CUMPENT CONT QTY/UNIT:	85 P	85 P
D1/09/91	000081		SH SOLVENT				1850.0000	0.0000
						CURRENT CONT GTY/UNIT:	185 G	1850 P
<u> </u>								

TEST COMPANY NAME, INC.
HAZARDOUS MATERIAL TRACKING SYSTEM

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NCV/USED DATE	сокті	PRODE	PRODUCT DESCRIPTION	DIPLI/NAE		QUANTITY LBS RCVD	QUANTITY LBS USED
01/09/91	000082					214.5000	0.0000
		_			CURRENT CONT CITY/UNIT:	165 G	215 P
01/09/91	000083					1128.1340	0.0000
		_			CURRENT CONT OTY/UNIT:	35 L	1128 P
01/09/91	000084					92.4000	0,0000
		_			CURRENT CONT CITY/UNIT:	42 K	92 P
01/09/91	000085	_				299.6400	0.0000
		_			CURRENT CONT QTY/UNIT:	136 K	300 P
01/09/91	000086	_				36,2000	0.0000
					CURRENT CONT CTY/UNIT:	36 P	36 8
01/09/91	000087					4544.8000	0.0000
		_			CURRENT CONT GTY/UNIT:	1136 G	4545 P
01/09/91	000088	_				536.2000	0.0000
					CURRENT CONT QTY/UNIT:	536 P	536 P
01/09/91	000089					71.0000	0.0000
					CURRENT CONT CTY/UNIT:	1136 0	71 P
01/09/91	000090	_				68.2625	0.0000
					CURRENT CONT OTY/UNIT:	1092 O	68 P
01/10/91	000091					92,2000	0.0000
		_			CURRENT CONT QTY/UNIT:	92 P	92 P
01/10/91	000092					295.6792	0.0000
					CURRENT CONT CTY/UNIT:	12 G	296 P
01/10/91	000093					3.2625	0.0000
		-			CURRENT CONT GTY/UNIT:	52 0	3 P
01/10/91	000094					0.2277	0.0000

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CONTAINERS HISTORY FROM: 01/01/91 TO 01/31/91

RCV/USED DATE	CONTE	11001	PRODUCT DESCRIPTION	D#14/IWE		QUARTITY LBS RCVD	CONTITY THE CRED
		-			CURRENT CONT QTY/UNIT:	104 R	0 P
01/10/91	000095					9912.5198	0.0000
					CLEURENT CONT GTY/UNIT:	1104 L	9913 2
01/10/91	000096					227.7000	0.0000
		***			CURRENT CONT QTY/UNIT:	104 Q	228 P
01/10/91	000097					83.6550	0.0000
		_			CURULENT CONT QTY/UNIT:	304 T	84 2
01/10/91	000098					0.6468	0.0000
			<u> </u>		CURRENT CONT GTY/UNIT:	4 0	1 2
01/10/91	000099					91.9600	0.0000
					CURVENT CONT QTY/UNIT:	24 Q	92 ?
01/10/91	000100					1414.1000	0.0000
					CURRENT CONT GTY/UNIT:	1414 P	1414 P

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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MSDS INVENTORY: PRODUCTS ON HAND

PIDe	DESCRIPTION		CONTE	57J	rT NTUS		QUANTITY RECEIVED	QUANTITY USED	DAT RCVD/USE
05012	BARIUTH COMPOUND	25	000001	F	1	4	100.0000	0,0000	01/01/9
			000001	£	1	4	0.0000	10,0000	01/01/9
			000001	F	1	4	0.0000	0.0000	01/03/9
			000001	F	1	4	0.0000	0.0000	01/05/9
	_		000001	r	1	4	0.0000	0.0000	01/05/9
	_						PRODUCT TOTAL POUR	DS ON HAND:	5
05015	NICKEL PLATED A	BRASIVE PRODUCTS	000002	D	1	4	123.2200	0.0000	01/01/9
			000002	D	1	4	0.0000	5,0000	01/01/
			000002	D	1	4	0.0000	100,0000	01/09/
			000009	ĸ	1	4	10.0000	0.0000	01/01/
			000009	ĸ	1	4	0.0000	10.0000	01/01/
			000016	D	1	4	200.0000	0.0000	01/02/
			000016	Đ	1	4	0.0000	0.0000	01/03/
			000016	D	1	4	0.0000	3.2555	01/03/
			000016	D	1	4	0.0000	8.1387	01/05/
			000016	D	1	4	0.0000	2.3104	01/07/
			000016	D	1	4	0.0000	0.4621	01/09/
			600016	D	1	4	0.0000	62.0000	01/10/
			000030	Q	1	5	1320.0000	0.0000	01/03/
			000030	Q	1	5	0.0000	0.7701	01/06/
			000053	0	1	4	2325.0000	0.0000	01/06.
	_		000098	F	1	4	0.6468	0.0000	01/10/
	_						PRODUCT TOTAL POUR	IDS ON HAND:	37
005016	INTERZING SILIC	ATE RED BINDER	000003	ĸ	1	4	100.0000	0.0000	01/01/
			000003	ĸ	1	4	0.0000	20,0000	01/01/
			000005	D	1	4	500,0000	0.0000	01/01/
			000005	D	1	4	0.0000	12.0000	01/01/
			000005	D	1	4	0.0000	488,0000	01/09
			000043	1	1	4	32.0000	0.0000	01/05
			000043	1	1	4	0.0000	32.0000	01/07
			000046	Q	1	4	52.0000	0.0000	01/05
			000072	E	1	4	99.4400	0.0000	01/08/
			000080	J	1	4	85.0000	0.0000	01/08/
	_		000088	۰	1	4	536.2000	0.0000	01/09/
							PRODUCT TOTAL POUR	ios on hand:	6
05017	2-PHENYLPHINOL,	99%	600004	¢	2	4	4400.0000	0.0000	01/01/
			000004	C	2	4	0.0000	10.0000	01/01/
			000004	C	2	4	0.0000	50.0000	01/03/
			000006	D	1	4	1320.0000	0.0000	01/01/
			000006	D	1	4	0.000.0	34.0000	01/01/
			000006	D	1	4	0.0000	22.0000	01/09/
			000039	E	1	4	968.0000	0.0000	01/04
			000039	E	1	4	0.0000	10,0000	01/06/
			000039	Σ	1	4	0.0000	958,0000	01/08/

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MSDS INVENTORY: PRODUCTS ON HAND

005018 G									NCVD/USED
00501 8 G			000036	H C	1	4	110.0000 227.7000	0.0000	01/07/91
005018 6		· · · · · · · · · · · · · · · · · · ·		_			PRODUCT TOTAL POUND	S ON HAND:	5942
	GENETRON 113 T	RICHLOROFLOURGETHANE	000007	ĸ	1	4	50.0000	0.0000	01/01/91
			000007	ĸ	1	4	0.0000	10.0000	01/01/91
			000007	x	1	4	0.0000	4.6000	01/04/91
			000007	ĸ	1	4	0.0000	35.4000	01/09/91
			000010	C	2	4	1150.0000	0.0000	01/01/91
			000010	С	2	4		150.0000	01/01/91
			000017	D	2	4	80,000	0.0000	01/02/91
			000017	D	2	4	0.0000	20.0000	01/04/91
			000017	D	2	4	0.0000	6.3250	01/07/91
			000017	D	2	4	0.0000	53.6750	01/10/91
			000028	L	1	4	100.0000	0.0000	01/03/91
			000028	L	1	4		100.0000	01/03/91
			000031	н	1	4	20.0000	0.0000	01/04/91
			000031	Н	1	4	0.0000	5.0000	01/04/91
			000031	н	1	4	0.0000	15.0000	01/08/91
			000065	ĸ	1	4	330.0000	0.0000	01/07/91
			000065	ĸ	1	4	0.0000	6.6125	01/08/91
			000084	1	1	5	92.4000	0.0000	01/09/91
							PRODUCT TOTAL POUNDS	S ON HANDE	416
005019 A	NOUN DIMMOND C	COLANT	800000	D	1	4	71.5000	0.0000	01/01/91
			000008	D	1	4	0.0000	6.5000	01/01/91
			000058	N	1	4	0.6563	0.0000	01/06/91
			000082	E	1	4	214.5000	0.0000	01/09/91
			000085	1	1	5	299.6400	0.0000	01/09/91
							PRODUCT TOTAL POUNDS	ON HAND:	580
05020 n	THORGANIC GLAS	3	000011	ĸ	1	4	100.0000	0.0000	01/02/91
			000011	ĸ	1	4	0.0000	12.0000	01/02/91
			000011	ĸ	1	4	0.0000	88.0000	01/10/91
			000019	ĸ	1	4	175.0000	0.0000	01/02/91
			000019	ĸ	1	4	0.0000	0.5538	01/02/91
			000019	ĸ	1	4	0.0000	174.4462	01/02/91
			000047	Q	1	4	1002.0000	0.0000	01/05/91
			000068	λ	1	4	718.3763	0.0000	01/07/91
			000094	F	1	4	0.2277	0.0000	01/10/91
							PRODUCT TOTAL POUNDS	ON HAND:	1721
005021 N	NYTI-FOULING B	DITION PAINT	000012	F	1	4	500.0000	0.0000	01/02/91
			000029	F	1	4	200.0000	0.0000	01/03/91
			000029	r	1	4	0.0000	200.000	01/06/91
			000042	¢	1	4	5450.0000	0.0000	01/04/91
i									

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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MSDS INVENTORY: PRODUCTS ON HAND

KP IDI	DESCRIPTION		CONT.	ST	NTUS		QUANTITY RECEIVED	QUANTITY USED	RCVD/US
			000042	С	1	4	0.000	11.0000	01/07/
			000069	F	1	4	17.0000	0.0000	01/07/
	*		000081	E	1	4	1850.0000	0.0000	01/09/
							PRODUCT TOTAL POUND	R ON HAND:	78
05022	124 ENMEL, H	BITABILITY COLORS	000013	F	1	4	610.0000	0.0000	01/02/
			000013	F	1	4	0.0000	B0.0000	01/02/
			000018	D	2	4	180.0000	0.0000	01/02/
			000018	D	2	4	0.0000	32,0000	01/02/
			000018	D	2	4	0.0000	12.0000	01/05/
			000018	D	2	4	0.0000	8.2500	01/06/
			000018	D	2	4		127.7500	01/09/
			000040	F	1	4	183.0000	0.0000	01/04/
			000059	£	1	4	23.1000	0.0000	01/06/
			000083	E	1	4	1128.1340	0,0000	01/09/
			000090	H	1		68.2625	0.0000	01/09/
							PRODUCT TOTAL POUND	S ON HAND:	19
05023	CENTEX TC-60		000014	D	1	4	550.0000	0.0000	01/02/
			000014	D	1	4	0.0000	45.0000	01/02/
			000048	Н	1	4	405.0000	0.0000	01/05/
			000048	H	1	4	0.0000	1.0120	01/10/
			000049	E	2	4	45.0000	0.0000	01/05/
			000067	λ	1	6	1330.0000	0.0000	01/07/
			000099	F	1	4	91.9600	0.0000	01/10/
							PRODUCT TOTAL POURIE	R ON HYND:	2
05024	PBI RECYCLED I	ACQUER THINNER	000015	λ	1	4	0.0000	4.5650	01/02/
			000015	λ	1	4	4.5650	0.0000	01/02/
			000020	Σ	1	4	0.8715	0.0000	01/02/
			000020	E.	1	4	0.0000	0.8715	01/03/
			000054	D	1	4	2.6975	0.0000	01/06/
			000066	H	1	4	266.8450	0.0000	01/07/
			000074	н	1	4	0.0214	0.0000	01/08/
			000091	E	1	4	92.2000	0.0000	01/10/
			000100	۵	1	4	1414.1000	0.0000	01/10/
			•				PRODUCT TOTAL POUND	s on hyno:	17
05025	INTERCLENE		000021	В	1	4	300.0000	0.0000	01/03/
			000021	B	1	4	0.0000	10.0000	01/03/
			000021	В	1	4	0.0000	0.2595	01/10/
			000055	D	1	4	22.8500	0.0000	01/06/
			000061	F	1	4	2.2506	0.0000	01/07/
			000089	H	1	4	71.0000	0.0000	01/09/
							PRODUCT TOTAL POUND	S ON HANDS	3

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MSDS INVENTORY: PRODUCTS ON HAND

			CONTE	377	HT ATUS		QUANTITY RECEIVED	USED	DATE ACVD/USED
005026	LD0733		000022	λ	2	4	320.0000	0.0000	01/03/91
003020	(10013)		000022	λ	2	4	0.0000	20,0000	01/05/91
			000037	×	ī	i	0.0000	17,5000	01/05/91
			000037	x	1	4	0.0000	102,5000	01/08/91
			000041	н	1	4	45.0000	0.0000	01/04/91
			000041	н	1	4	0.0000	30,0000	01/05/91
			000041	н	1	4	0.0000	15.0000	01/05/91
			000051	1	1	4	100.0000	0.0000	01/06/91
			000051	1	1	4	0.0000	54.0625	01/07/91
	_		000073	E	1	4	2698.1822	0.0000	01/08/91
	-						PRODUCT TOTAL POUN	DS ON HAND!	3034
05027	INTERGARD EPOXY		600023	D	2	4	179.6560	0.0000	01/03/91
			000023	D	2	4	0.0000	10.0000	01/03/91
			000023	D	2	4	0.0000	169.6560	01/06/91
			000024	D	2	4	179.6560	0,0000	01/03/9
			000024	D	2	4	0.0000	179.6560	01/05/9
			000036	F	1	4	20,0000	0.0000	01/04/91
			000079	0	1	4	0000.000	0.0000	01/08/9
			000079	٥	1	4	0.000	62.0000	01/10/9
	-		000095	В	1	4	9912.5198	0.0000	01/10/9
							PRODUCT TOTAL POUR	DS ON HAND:	1067
05020	HIL-P RED DYE		000025	D	1	5	75.0000	0.0000	01/03/9
			000034	F	1	4	11.0000	0.0000	01/04/9
	1		000034	F	1	4	0.0000	11.0000	01/04/9
			000052 000086	ĸ	1	4	125,0000 36,2000	0.0000	01/06/9
	-						PRODUCT TOTAL POUN		23
05020	CON 8361 CLEAR	COCKAL STITCATE	000026	1	1	4	179.0000	0.0000	01/03/9
			000026	ī	1	1	0.0000	16.0000	01/04/9
			000026	i	1	1	0.0000	100.0000	01/04/9
			000028	Ĵ	i	•	\$.0625	0.0000	01/03/9
			000027	J	i	4	0.0000	8.0625	01/03/9
			000035	Ε	i	-	56.0000	0.0000	01/04/9
			000035	E	i	à	0.0000	22.0000	01/06/9
			000050	J	i	4	25,0000	0.0000	01/05/9
			000050	J	i	4	0.0000	25.0000	01/07/9
			000071	F	1	à	1725.6000	0.0000	01/08/9
j	POTASH SCOALDER						PRODUCT TOTAL POUR	DE ON HAND!	192
05030	POTASH SCOAL DE	ZING SILICATE	000036	ĸ	1	4	120.0600	0.0000	01/04/9
			000038	ĸ	1	4	10.0000	0.0000	01/04/9
			000038	K	1	4	0.0000	6.0000	01/04/9
:									

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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MSDS INVENTORY: PRODUCTS ON HAND

121D#	DESCRIPTION		CONT	577	rr NTUS		QUANTITY RECEIVED	QUANT ITY USED	DAT RCVD/USE
			000038	ĸ	1	4	0.0000	4.0000	01/04/9
			000076	ĸ	1	4	132.4400	0.0000	01/08/9
			000093	F	1	4	3.2625	0.0000	01/10/9
		·					PRODUCT TOTAL POUR	OS ON HUND:	13
005031	INTERPLATE RED	FERRO/ZINC SILICATE	000044	Q	2	4	1332.0000	0.0000	01/05/9
			. 000044	Q	2	4	0.0000	8.0000	01/07/
			000056	H	1	4	1125.0000	0.0000	01/06/9
			000057	н	1	4	5.2500	0.0000	01/06/
			000075	Ε	1	4	110.2000	0.0000	01/08/
			000075	E	1	4	0.0000	10.0000	01/08/
			000075	E	1	4	0.0000	7.0000	01/10/
			000087	В	2	4	4544.8000	0.0000	01/09/
							PRODUCT TOTAL POUR	OS ON HAND:	70
005032	INTERLAC BLACK	ALKYD ENAMEL	000070	F	1	4	34.5400	0.0000	01/07/
			000097	С	2	5	83.6550	0.0000	01/10/
							PRODUCT TOTAL POUR	DS ON HAND:	1
005033	ACETYLENE		000032	L	2	4	120.0000	0.0000	01/04/
			000032	L	2	4	0.0000	100.0000	01/09/
			000062	L	2	5	1996.3000	0.0000	01/07/
							PRODUCT TOTAL POUR	IDS ON HAND:	20
005034	EASTMAN POLYES	TER RED 2G DYE	000033	F	1	4	242.3600	0.0000	01/04/
			000033	F	1	4	0.0000	242.3600	01/06/
			000045	Q	1	4	432.0000	0.0000	01/05/
			000045	Q	1	4	0.0000	5.0000	01/05/
			000060	F	1	4	2.3437	0.0000	01/06/
			000064	н	1	4	302.9500	0.0000	01/07/
			000077	ĸ	1	4	1232.4400	0.0000	01/08/
			000078	F	1	4	2.2000	0.0000	01/08/
			000092	E	1	4	295.6792	0.0000	01/10/
							PRODUCT TOTAL POUR	IDS ON HAND:	22

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ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91

HPID#: 005012 TRADE NAME: BARIUIM COMPOUNDS

VOCs LBS/GAL: 4.0000 LBS/GAL

CATEGORY:

MARINE COATING RULE GRAMS/LITER:

DEPARTMENT: 0029 RIGGING

AREA: 0001 PAINT DEPARTMENT SMALL PARTS ROOM

DATE VOCS (LBS) 000001 01/01/91 5.0000 ------AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS): 2273 DEPT TOTAL VOC EMISSIONS (LBS):

DEPT TOTAL VOC EMISSIONS (GRAMS):

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM REPORT DATE: 01/14/92 REPORT#: 64

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ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91

HPID#: 005018 TRADE NAME: GENETRON 113 TRICHLOROFLOUROETHANE VOCs LBS/GAL: 0.9000 LBS/GAL

CATEGORY:

MARINE COATING RULE GRAMS/LITER:

DEPARTMENT: 0007 CARPENTRY

AREA: 0015 PIPE SHOP WATER FRONT TOOL BOOTH

CONT# DATE VOCS (LBS) 000065 01/08/91 2.5875 AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS): 1176

> DEPT TOTAL VOC EMISSIONS (LBS): DEPT TOTAL VOC EMISSIONS (GRAMS): 1176

DEPARTMENT: 0008 ELECTRICAL

AREA: 0002 BLAST BOOTH

CONT# DATE VOCS (LBS) 000007 01/09/91 13.8520 _______ AREA TOTAL VOC EMISSIONS (LBS): 14

AREA TOTAL VOC EMISSIONS (GRAMS):

AREA: 0003 BUILDING 21 TOOL ROOM

CONT# DATE VOCS (LBS) 000007 01/04/91 1.8000

> AREA TOTAL VOC EMISSIONS (LBS): 2 AREA TOTAL VOC EMISSIONS (GRAMS):

818

6296

AREA: 0005 MAIN TOOL ROOM

CONT DATE VOCS (LBS) 000007 01/01/91 3.9130

AREA TOTAL VOC EMISSIONS (LBS):

AREA TOTAL VOC EMISSIONS (GRAMS): 1779

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ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91

DEPT TOTAL VOC EMISSIONS (LBS): 20
DEPT TOTAL VOC EMISSIONS (GRAMS): 8893

DEPARTMENT: 0011 TESTING

AREA: 0001 PAINT DEPARTMENT SMALL PARTS ROOM

CONT# DATE VOCS (LBS)
000028 01/03/91 39.1300

AREA TOTAL VOC EMISSIONS (LBS): 39
AREA TOTAL VOC EMISSIONS (GRAMS): 17786

AREA: 0012 WAREHOUSE 8 TOOL ROOM BIN 18

CONT# DATE VOCS (LBS)
000031 01/04/91 1.9565

AREA TOTAL VOC EMISSIONS (LBS): 2
AREA TOTAL VOC EMISSIONS (GRAMS): 889

AREA: 0015 PIPE SHOP WATER FRONT TOOL BOOTH

 CONT#
 DATE
 VOCS (LBS)

 000031
 01/08/91
 5.8695

AREA TOTAL VOC EMISSIONS (LBS): 6
AREA TOTAL VOC EMISSIONS (GRAMS): 2668

DEPT TOTAL VOC EMISSIONS (LBS): 47
DEPT TOTAL VOC EMISSIONS (GRAMS): 21344

DEPARTMENT: 0015 ENGINEERING

AREA: 0001 PAINT DEPARTMENT SMALL PARTS ROOM

DEPT TOTAL VOC EMISSIONS (LBS): 450
DEPT TOTAL VOC EMISSIONS (GRAMS): 204543

DEPARTMENT: 0019 FABRICATION

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM REPORT DATE: 01/14/92 REPORT#: 64

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ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91

AREA: 0004 LAMINATING EAST SHOP FLOOR

CONT# DATE VOCS (LBS)

000017 01/10/91 21.0030

AREA TOTAL VOC EMISSIONS (LBS): 21
AREA TOTAL VOC EMISSIONS (GRAMS): 9547

AREA: 0007 QUALITY ASSURANCE LAB

CONT# DATE VOCS (LBS)
000017 01/04/91 7.8260

AREA TOTAL VOC EMISSIONS (LBS): 8
AREA TOTAL VOC EMISSIONS (GRAMS): 3557

AREA: 0019 GASOLINE STATION NUMBER 1

CONT# DATE VOCS (LBS)
000017 01/07/91 2.4750

AREA TOTAL VOC EMISSIONS (LBS): 2
AREA TOTAL VOC EMISSIONS (GRAMS): 1125

DEPT TOTAL VOC EMISSIONS (LBS): 31
DEPT TOTAL VOC EMISSIONS (GRAMS): 14229

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Final Report

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM REPORT DATE: 01/14/92 REPORT#: 64 PAGE#: 5 ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91 HPID#: 005019 TRADE NAME: AQUA DIAMOND COOLANT VOCs LBS/GAL: 0.4000 LBS/GAL CATEGORY: MARINE COATING RULE GRAMS/LITER: DEPARTMENT: 0010 HULL ______ AREA: 0004 LAMINATING EAST SHOP FLOOR CONT# DATE VOCS (LBS) _____ 800000 01/01/91 2.0000 AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS): DEPT TOTAL VOC EMISSIONS (LBS): DEPT TOTAL VOC EMISSIONS (GRAMS): HMTS Final Report

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM REPORT DATE: 01/14/92 REPORT#: 64 PAGE#: 6

485

33

ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91

HPID#: 005020 TRADE NAME: INORGANIC GLASS VOCs LBS/GAL: 0.2000 GRAMS/LITER CATEGORY: MARINE COATING RULE GRAMS/LITER:

DEPARTMENT: 0009 WELDING

909

909

AREA: 0002 BLAST BOOTH

DATE VOCS (LBS) CONT# ________________________________ 01/02/91 1.0641 000019 AREA TOTAL VOC EMISSIONS (LBS): 1 AREA TOTAL VOC EMISSIONS (GRAMS): 484

AREA: 0014 PIPE SHOP MAIN TOOL ROOM

CONT# DATE VOCS (LBS) 01/02/91 0.0034 000019 ______ AREA TOTAL VOC EMISSIONS (LBS): 0 AREA TOTAL VOC EMISSIONS (GRAMS): DEPT TOTAL VOC EMISSIONS (LBS):

DEPARTMENT: 0012 BLASTING

AREA: 0001 PAINT DEPARTMENT SMALL PARTS ROOM

______ DATE VOCS (LBS) CONT# 01/02/91 0.0732 000011 ________ AREA TOTAL VOC EMISSIONS (LBS): ٥

AREA TOTAL VOC EMISSIONS (GRAMS):

AREA: 0021 ENGINEERING SUPPLY SHELF 17

DATE VOCS (LBS) 01/10/91 0.5368 000011

AREA TOTAL VOC EMISSIONS (LBS): 1 AREA TOTAL VOC EMISSIONS (GRAMS): 244

DEPT TOTAL VOC EMISSIONS (GRAMS):

49

REPORT DATE: 01/14/92 REPORT#: 64

PAGE#: 7

ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91

> DEPT TOTAL VOC EMISSIONS (LBS): DEPT TOTAL VOC EMISSIONS (GRAMS): 277

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM REPORT DATE: 01/14/92 REPORT#: 64

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0

ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91

HPID#: 005021 TRADE NAME: ANTI-FOULING BOTTOM PAINT 0.2000 GRAMS/LITER

VOCs LBS/GAL: CATEGORY:

MARINE COATING RULE GRAMS/LITER:

DEPARTMENT: 0003 OUTSIDE MACH

AREA: 0020 ENGINEERING SUPPLY SHELF 12

CONT# DATE VOCS (LBS) 000042 01/07/91 0.0022

> ------AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS): 1

> DEPT TOTAL VOC EMISSIONS (LBS): DEPT TOTAL VOC EMISSIONS (GRAMS): 0

DEPARTMENT: 0011 TESTING

AREA: 0016 INSULATING SHOP CRIB

CONT# DATE VOCS (LBS) 000029 01/08/91 0.0400

> AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS): 18

> DEPT TOTAL VOC EMISSIONS (LBS): 0 DEPT TOTAL VOC EMISSIONS (GRAMS): 18

REPORT DATE: 01/14/92 REPORT#: 64

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ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91

HPID#: 005022 TRADE NAME: 124 ENAMEL, HABITABILITY COLORS

VOCs LBS/GAL: 1.2000 GRAMS/LITER

CATEGORY:

MARINE COATING RULE GRAMS/LITER:

DEPARTMENT: 0010 HULL

AREA: 0001 PAINT DEPARTMENT SMALL PARTS ROOM

CONT# DATE VOCS (LBS) 000018 01/05/91 0.0096 _______

> AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS):

AREA: 0002 BLAST BOOTH

CONT# VOCS (LBS) DATE 000018 01/02/91 0.0256 ______

> AREA TOTAL VOC EMISSIONS (LBS): 0 AREA TOTAL VOC EMISSIONS (GRAMS): 12

AREA: 0005 MAIN TOOL ROOM

CONT# DATE VOCS (LBS) 000018 01/06/91 0.0066

> AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS):

AREA: 0022 PAINT TEST AREA

CONT# DATE VOCS (LBS) 000018 01/09/91 0.1022 AREA TOTAL VOC EMISSIONS (LBS):

AREA TOTAL VOC EMISSIONS (GRAMS): 46 DEPT TOTAL VOC EMISSIONS (LBS): Ω

DEPT TOTAL VOC EMISSIONS (GRAMS):

DEPARTMENT: 0013 QUALITY ASSURE.

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM REPORT DATE: 01/14/92 REPORT#: 64

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ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91

AREA: 0021 ENGINEERING SUPPLY SHELF 17

CONT#	DATE	VOCS (LBS)
000013	01/02/91	0.0640
	AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS):	0 29
	DEPT TOTAL VOC EMISSIONS (LBS): DEPT TOTAL VOC EMISSIONS (GRAMS):	0 29

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TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM REPORT DATE: 01/14/92 REPORT#: 64

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ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91

HPID#: 005023 TRADE NAME: GENTEX TC-60

VOCs LBS/GAL: CATEGORY:

0.2000 LBS/GAL

MARINE COATING RULE GRAMS/LITER:

DEPARTMENT: 0014 INDUSTRIAL ENGR

AREA: 0002 BLAST BOOTH

CONT# DATE VOCS (LBS) 000048 01/10/91 0.0134

> AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS):

DEPT TOTAL VOC EMISSIONS (LBS): DEPT TOTAL VOC EMISSIONS (GRAMS):

DEPARTMENT: 0015 ENGINEERING

AREA: 0003 BUILDING 21 TOOL ROOM

CONT# DATE VOCS (LBS) 000014 01/02/91 0.5940

AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS): 270

DEPT TOTAL VOC EMISSIONS (LBS): DEPT TOTAL VOC EMISSIONS (GRAMS): 270 TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM REPORT DATE: 01/14/92 REPORT#: 64

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0

81

425

ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91

HPID#: 005024 TRADE NAME: PBI RECYCLED LACQUER THINNER

VOCs LBS/GAL: 0.2000 GRAMS/LITER

CATEGORY:

6

MARINE COATING RULE GRAMS/LITER:

DEPARTMENT: 0009 WELDING

AREA: 0001 PAINT DEPARTMENT SMALL PARTS ROOM

CONT# DATE VOCS (LBS) 000020 01/03/91 0.1785

AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS): 81

DEPT TOTAL VOC EMISSIONS (LBS): DEPT TOTAL VOC EMISSIONS (GRAMS):

DEPARTMENT: 0012 BLASTING

AREA: 0001 PAINT DEPARTMENT SMALL PARTS ROOM

CONT# VOCS (LBS) DATE 000015 01/02/91 0.9349 AREA TOTAL VOC EMISSIONS (LBS):

DEPT TOTAL VOC EMISSIONS (LBS):

AREA TOTAL VOC EMISSIONS (GRAMS):

DEPT TOTAL VOC EMISSIONS (GRAMS): 425

52

REPORT DATE: 01/14/92 REPORT#: 64

PAGE#: 13

ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91

HPID#: 005027 TRADE NAME: INTERGARD EPOXY

VOCs LBS/GAL: 0.0100 LBS/GAL

CATEGORY:

MARINE COATING RULE GRAMS/LITER:

DEPARTMENT: 0011 TESTING

AREA: 0001 PAINT DEPARTMENT SMALL PARTS ROOM

CONT#	DATE	Vocs (LBS)
000023 000024	01/03/91 01/05/91	0.0290 0.5210
	AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS):	1 250

AREA: 0005 MAIN TOOL ROOM

AKLA:	0005	MAIN	TOOP	ROOM			
CON	rŧ				DATE	VOCS (LBS)	
000	023				01/06/91	0.4920	
					AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS):	0 224	
					DEPT TOTAL VOC EMISSIONS (LBS): DEPT TOTAL VOC EMISSIONS (GRAMS):	1 474	

DEPARTMENT: 0023 QUALITY CIRCLES

AREA: 0001 PAINT DEPARTMENT SMALL PARTS ROOM

CONT#	DATE	Vocs (LBS)
000079	01/10/91	0.1798
	AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS):	0 82
	DEPT TOTAL VOC EMISSIONS (LBS): DEPT TOTAL VOC EMISSIONS (GRAMS):	0 82

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91

HPID#: 005028 TRADE NAME: MIL-P RED DYE

CATEGORY:

VOCs LBS/GAL: 0.0100 LBS/GAL

MARINE COATING RULE GRAMS/LITER:

DEPARTMENT: 0011 TESTING

AREA: 0002 BLAST BOOTH

CONT#	DATE	VOCS (LBS)
000034	01/04/91	0.1001
	AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS):	0 46

DEPT TOTAL VOC EMISSIONS (LBS): DEPT TOTAL VOC EMISSIONS (GRAMS): 46

REPORT DATE: 01/14/92

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568

ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91

HPID#: 005029 TRADE NAME: CGW 8361 CLEAR CROWN SILICATE

0.0100 LBS/GAL VOCs LBS/GAL:

CATEGORY:

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MARINE COATING RULE GRAMS/LITER:

DEPARTMENT: 0006 INSULATING

AREA: 0002 BLAST BOOTH

CONT DATE VOCS (LBS) 01/08/91 1.2500 000026

> AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS):

AREA: 0011 WAREHOUSE 8 TOOL ROOM BIN 17

DATE VOCS (LBS) CONT#

0.1250 01/04/91 000026

> AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS):

> > DEPT TOTAL VOC EMISSIONS (LBS): DEPT TOTAL VOC EMISSIONS (GRAMS): 625

DEPARTMENT: 0011 TESTING

AREA: 0011 WAREHOUSE 8 TOOL ROOM BIN 17

CONT# DATE VOCS (LBS) 01/03/91 0.1008 000027

> AREA TOTAL VOC EMISSIONS (LBS): 0 AREA TOTAL VOC EMISSIONS (GRAMS): 46

> > DEPT TOTAL VOC EMISSIONS (LBS): n DEPT TOTAL VOC EMISSIONS (GRAMS): 46

DEPARTMENT: 0014 INDUSTRIAL ENGR

AREA: 0024 HULL 0006 AFT DECK BINS

CONT# DATE VOCS (LBS) TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91

01/07/91 0.3125 000050 ______ _____ AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS): 142

> DEPT TOTAL VOC EMISSIONS (LBS): O DEPT TOTAL VOC EMISSIONS (GRAMS): 142

DEPARTMENT: 0027 PURCHASING

AREA: 0027 GRAVING DRYDOCK

VOCS (LBS) DATE CONT# 000035 01/06/91 0.2750 AREA TOTAL VOC EMISSIONS (LBS): 0 AREA TOTAL VOC EMISSIONS (GRAMS): 125

> DEPT TOTAL VOC EMISSIONS (LBS): 0 DEPT TOTAL VOC EMISSIONS (GRAMS): 125

REPORT DATE: 01/15/92 TIER TWO - EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY H 1 4 PIPE SHOP WATER FRONT TOOL BOOTH SPECIFIC INFORMATION BY CHEMICAL REPORT#: 65 REPORTING PERIOD: 10191 TO 123191 CHEMICAL DESCRIPTION TRADE SECRET: N CASE: 50782 CHEMICAL NAME: ACETYLSALICYLIC ACID FACILITY IDENTIFICATION OWNER IDENTIFICATION PURE: X HIX: SOLID: LIQUID: GAS: JOHN JOHNSON TEST COMPANY NAME, INC. PHYSICAL AND HEALTH HAZARDS 1 HARBOR DRIVE SAME FIRE: SUDDEN REL OF PRESSURE: REACTIVITY: IMPEDIATE (ACUTE): DELAYED (CHRONIC): PLATTEVILLE, WI 53818-0000 PLATTEVILLE, WI 53818-0000 INVENTORY (LOW/HIGH) SIC CODE: 5381 DUN & BRAD NUMBER: 12-123-1231 HAX DAILY AMOUNT: 1777.0 AVG. DAILY AMOUNT: 1763.0 NO. DAYS ON-SITE: 360.0 2133.0 2115.0 EMERGENCY CONTACT TOM JONES OPER MGR 608-348-8815 24HR; 608-348-8816 STORAGE CODES AND LOCATIONS: B 2 4 INSULATING SHOP CRIB E 1 4 QUALITY ASSURANCE LAB BRUCE CLARK ENVR MGR 608-348-9912 24HR: 608-348-8812 N 1 4 PIPE SHOP HAIN TOOL ROOM N 1 4 HULL 0006 AFT DECK BINS PLANT OR SITE ID: MAIN Q 2 4 PAINT TEST AREA CHEMICAL DESCRIPTION TRADE SECRET: N CASE: 2429803 CHEMICAL NAME: C.I. ACID GRANGE 45 PURE: X HIX: SOLID: LIQUID: GAS: CHEMICAL DESCRIPTION TRADE SECRET: Y CASE: 83329 CHEHICAL NAME: ACENAPICHERE PHYSICAL AND HEALTH HAZARDS PURE: X HIX: SOLID: LIQUID: GAS: FIRE: SUCCEN REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHRONIC): PHYSICAL AND HEALTH HAZARDS FIRE: SUDDEN REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHRONIC): INVENTORY (LOW/HIGH) TRADITORY (TOM/RIGH) MAX DAILY AMOUNT: 49.0 AVG. DAILY AMOUNT: 49.0 NO. DAYS ON-SITE: 362.0 62.0 61.0 HAX DAILY AMOUNT: \$7.0 AVG. DAILY AMOUNT: \$5.0 NO. DAYS ON-SITE: 364.0 174.0 170.0 STORAGE CODES AND LOCATIONS: D 1 5 BUILDING 21 TOOL ROOM F 1 4 BLAST BOOTH STORAGE CODES AND LOCATIONS: D 1 4 PAINT DEPARTMENT SMALL PARTS ROOM K 1 4 QUALITY ASSURANCE LAB E 1 4 PAINT TEST AREA K 1 5 ENGINEERING SUPPLY SHELF 17 I 1 5 NAREHOUSE & TOOL ROOM BIN 17 N 1 4 DIPPING BOOTH CHEMICAL DESCRIPTION TRADE SECRET: Y CAS4: 3567655 CHEMICAL NAME: C.I. ACID RED 85 CHEMICAL DESCRIPTION TRACE SECRET: H PURE: X MIX: SOLID: LIQUID: GAS: CAMP: 64197 CHEMICAL NAME: ACETIC ACID, GLACIAL PURE: X HIX: SOLID: LIQUID: GAS: PHYSICAL AND HEALTH HAZARDS FIRE: SUDDEN REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHRONIC): TIRE: X SUCCEM REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHRONIC):

INVENTORY (LOW/RIGH) PHYSICAL AND HEALTH HAZARDS INVENTORY (LOH/HIGH) | 124.0 ANG. DAILY AMOUNT: 106.0 NO. DAYS ON-SITE: 364.0 | 158.0 | 158.0 | HAX DAILY AMOUNT: 2041.0 AVG. DAILY AMOUNT: 2025.0 NO. DAYS ON-SITE: 361.0 2154.0 2138.0 STORAGE CODES AND LOCATIONS: E 1 4 MAREHOUSE 8 TOOL ROOM BIN 22 F 1 4 PAINT DEPARTMENT SHALL PARTS ROOM STORAGE CODES AND LOCATIONS: C 2 4 PAINT DEPARTMENT SMALL PARTS ROOM F 1 4 DIPPING BOOTH D 2 4 LINIDIATING EAST SHOP FLOOR F 1 4 PAINT TEST AREA I 1 5 HARRINUSE 8 TOOL BOON BIN 17 K 1 4 HAREHOUSE B TOOL ROOM BIN 18 R 1 4 BIAST BOOTH H 1 4 INSULATING SHOP CRIB K 1 4 PIPE SHOP WATER FRONT TOOL BOOTH O 1 4 BUILDING 21 TOOL ROOM L 1 4 PAINT DEPARTMENT SHALL PARTS BOOM

Report

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CHEMICAL DESCRIPTION TRADE SECRET: N
                                                                                                                                     INVENTORY (LOW/HIGH)
     CASE: 107029 CHEMICAL NAME: ACROLEIN
    PURE: X HIX: SOLID: LIQUID: GAS:
                                                                                                                                     MAX DAILY AMOUNT: 1190.0 ANG. DAILY AMOUNT: 1180.0 NO. DAYS ON-SITE: 363.0
     PHYSICAL AND HEALTH HAZARDS
                                                                                                                                                      1901.0
                                                                                                                                                                                1894.0
    FIRE: SUDDEN REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): X DELAYED (CHACNIC):
                                                                                                                                         STORAGE CODES AND LOCATIONS: A 2 4 WAREHOUSE 8 TOOL ROOM BIN 22
     INVENTORY (LOW/HIGH)
                                                                                                                                                                      C 1 4 ENGINEERING SUPPLY SHELF 12
     MAX DAILY AMOUNT: 62.0 AUG. DAILY AMOUNT: 53.0 NO. DAYS ON-SITE: 364.0
                                                                                                                                                                      E 1 4 WAREHOUSE 8 TOOL ROOM BIN 17
                                                                                                                                                                      E 1 4 PAINT TEST AREA
                                                  106.0
                       124.0
                                                                                                                                                                      F 1 4 MAIN TOOL ROOM
                                                                                                                                                                      F 1 4 INSULATING SHOP CRIB
         STORAGE CODES AND LOCATIONS: C 2 4 PAINT DEPARTMENT SHALL PARTS ROOM
                                                                                                                                                                      F 1 4 RIGGING BACK OFFICE
                                      D 2 4 LAMIDIATING EAST SHOP FLOOR
                                                                                                                                                                      I 1 4 HULL 0006 AFT DECK BINS
                                      I 1 5 WAREHOUSE 8 TOOL ROOM BIN 17
                                                                                                                                                                      K 1 4 QUALITY ASSURANCE LAB
                                      K 1 4 BLAST BOOTH
                                                                                                                                                                      M 1 4 PAINT DEPARTMENT SHALL PARTS ROOM
                                      K 1 4 PIPE SHOP WATER FRONT TOOL BOOTH
                                      L 1 4 PAINT DEPARTMENT SHALL PARTS BOOM
                                                                                                                                     CHEMICAL DESCRIPTION TRADE SECRET: N
                                                                                                                                     CASE: 561784 CHEMICAL NAME: ALPHAPRODINE HYDROCHLORIDE
                                      H 1 4 PIPE SHOP WATER FRONT TOOL BOOTH
                                                                                                                                     PURE: X MIX: SOLID: LIQUID: GAS:
     CHEMICAL DESCRIPTION TRADE SECRET: N
                                                                                                                                     PHYSICAL AND HEALTH HAZARDS
     CAS#: 23214928 CHEMICAL NAME: AURIMINCH
                                                                                                                                     FIRE: SUDDEN REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHRONIC):
     PURE: X HIX: SOLID: LIQUID: GAS:
     PHYSICAL AND HEALTH HAZARDS
                                                                                                                                     INVENTORY (LOH/HIGH)
     FIRE: SUDDEN REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHRONIC):
                                                                                                                                     MAX DAILY AMOUNT: 119.0 AVG. DAILY AMOUNT: 118.0 NO. DAYS ON-SITE: 362.0
                                                                                                                                                        218.0
                                                                                                                                                                                  217.0
     INVENTORY (LOW/HIGH)
     MAX DAILY AMOUNT: 97.0 AVG. DAILY AMOUNT: 96.0 NO. DAYS ON-SITE: 364.0
                       194.0
                                                  193.0
                                                                                                                                         STORAGE CODES AND LOCATIONS: B 1 4 DIPPING BOOTH
                                                                                                                                                                      D 1 4 LIMINATING EAST SHOP FLOOR
                                                                                                                                                                      F 1 4 HARPHOUSE 8 TOOL ROOM BIN 22
         STORAGE CODES AND LOCATIONS: F 1 4 GASOLINE STATION NUMBER 1
                                                                                                                                                                      N 1 4 RIGGING BACK OFFICE
                                      K 1 4 BLAST BOOTH
                                      K 1 4 PIPE SHOP MAIN TOOL ROOM
                                                                                                                                     CHEMICAL DESCRIPTION TRADE SECRET: N
                                                                                                                                     CASE: 28981977 CHEMICAL NAME: ALPRAZOLAM
                                                                                                                                     PURE: X MIX: SOLID: LIQUID: GAS:
     CHEMICAL DESCRIPTION TRADE SPERET: Y
     CASE: 7220817 CHEMICAL HAME: AFLATOXIN B2
     PURE: X MIX: SCLID: LIQUID: CAS:
                                                                                                                                     PHYSICAL AND HEALTH HAZARDS
                                                                                                                                     FIRE: SUCCEN REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHRONIC):
     PHYSICAL AND NEALTH HAZARDS
     FIRE: SUCCEN REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHRONIC):
                                                                                                                                     INVENTORY (LOW/HIGH)
                                                                                                                                     MAX DAILY AMOUNT: 1066.0 AVG. DAILY AMOUNT: 1058.0 NO. DAYS ON-SITE: 360.0
     INVESTORY (LOW/HIGH)
                                                                                                                                                       2133.0
                                                                                                                                                                                 2115.0
 HAX DAILY MODRIT: 30.0 ANG. DAILY MODRIT: 29.0 NO. DAYS ON-SITE: 358.0
47.0
47.0
                                                                                                                                          STORAGE CODES AND LOCATIONS: B 2 4 INSULATING SHOP CRIB
                                                                                                                                                                      E 1 4 QUALITY ASSURANCE LAB
         STORAGE CODES AND LOCATIONS: C 2 5 BUILDING 21 TOOL ROOM
                                                                                                                                                                      N 1 4 PIPE SHOP MAIN TOOL ROOM
CHEMICAL DESCRIPTION TRADE SECRET: N
O CAME: 107779 CHEMICAL NAME: ***
                                      F 1 4 HULL 0007 AFT DECK BINS
                                                                                                                                                                      N 1 4 HULL COOK AFT DECK BINS
                                                                                                                                                                      O 2 4 PAINT TEST AREA
     CAME: 107379 CHENICAL HAME: ALLYL TRICHEOROSILANE
                                                                                                                                     CHEMICAL DESCRIPTION TRADE SECRET: N
     PURE: X HIX: SOLID: LIQUID: CAS:
                                                                                                                                     CASA: 140007 CHEMICAL NAME: 2-AMINO-5-DIETHYLAMINOPENTAME
                                                                                                                                     PURE: X HIX: SOLID: LIQUID: GAS:
     PHYSICAL AND HEALTH BAZARDS
     FIRE: SUCCEN REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHRONIC):
                                                                                                                                     PHYSICAL AND HEALTH HAZARDS
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FIRE: SUCCESS REL OF PRESSURE: REACTIVITY: IMPEDIATE (ACUTE): DELAYED (CHRONIC):
                                                                                                                                  FIRE: SUCDEM REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHRONIC):
                                                                                                                                  DAVINTORY (LOW/HIGH)
   INVENTORY (LOH/HIGH)
                                                                                                                                  MAX DATLY AMOUNT: 363.0 AVG. DATLY AMOUNT: 360.0 NO. DAYS ON-SITE: 363.0
   HAX DAILY AMOUNT: 73.0 AUG. DAILY AMOUNT: 72.0 NO. DAYS ON-SITE: 361.0
                      87.0
                                                87.0
                                                                                                                                                     630.0
                                                                                                                                                                              624.0
       STORAGE CODES AND LOCATIONS: F 1 4 GASOLINE STATION HUMBER 1
                                                                                                                                      STORAGE CODES AND LOCATIONS: A 1 6 RIGGING BACK OFFICE
                                                                                                                                                                   D 1 4 HACKING TOOL BOOK
                                   K 1 4 BLAST BOOTH
                                                                                                                                                                   E 2 4 WAREHOUSE 8 TOOL ROOM BIN 16
                                   K 1 4 PIPE SHOP HAIN TOOL BOOM
                                                                                                                                                                   F 1 4 MAREHOUSE 8 TOOL ROOM BIN 22
   CHEMICAL DESCRIPTION TRACE SECRET: N
                                                                                                                                                                   H 1 4 BLAST BOOTH
  CASE: 117793 CHEMICAL NAME: 2-AMINOANTIRAQUINONE
   PURE: X HIX: SOLID: LIQUID: GAS:
                                                                                                                                  CHEMICAL DESCRIPTION TRADE SECRET: N
                                                                                                                                  CASS: 1111780 CHEMICAL HAME: AMMONIUM CARBAMATE
                                                                                                                                  PURE: X MIX: SOLID: LIQUID: GAS:
   PHYSICAL AND HEALTH HAZARDS
   FIRE: SUCCEN REL OF PRESSURE: REACTIVITY: IMPEDIATE (ACUTE): DELAYED (CHRONIC):
                                                                                                                                  PHYSICAL AND HEALTH HAZARDS
                                                                                                                                  FIRE: SUDDEN REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHRONIC):
   INVENTORY (LON/HIGH)
                                                                                                                                  INVENTORY (LOW/HIGH)
   MAX DAILY AMOUNT: 995.0 AVG. DAILY AMOUNT: 980.0 NO. DAYS ON-SITE: 363.0
                    1213.0
                                              1194.0
                                                                                                                                  MAX DAILY AMOUNT: 49.0 AVG. DAILY AMOUNT: 49.0 NO. DAYS ON-SITE: 362.0
                                                                                                                                                                               61.0
                                                                                                                                                      62.0
       STORAGE CODES AND LOCATIONS: A 1 4 MAREHOUSE & TOOL ROOM BIN 17
                                    B 1 4 DIPPING BOOTH .
                                    D 1 4 LIMINATING EAST SHOP FLOOR
                                                                                                                                      STORAGE CODES AND LOCATIONS: D 1 5 BUILDING 21 TOOL ROOM
                                   D 1 4 QUALITY ASSURANCE LAB
                                                                                                                                                                   F 1 4 BLAST BOOTH
                                                                                                                                                                   K 1 4 QUALITY ASSURANCE LAB
                                    E 1 4 PAINT DEPARTMENT SHALL PARTS ROOM
                                                                                                                                                                   K 1 5 ENGINEERING SUPPLY SHELF 17
                                    E 1 4 WAREHOUSE & TOOL NOON BIN 22
                                    F 1 4 MAREHOUSE 8 TOOL NOOM BIN 22
                                    H 1 4 MANEHOUSE & TOOL ROOM BIN 18
                                                                                                                                  CHEMICAL DESCRIPTION TRADE SECRET: N
                                                                                                                                  CASE: 1344281 CHEMICAL NAME: A-ALUMINA
                                   H 1 4 PAINT DEPARTMENT SHALL PARTS ROOM
                                   N 1 4 RIGGING BACK OFFICE
                                                                                                                                  PURE: X MIX: SOLID: LIQUID: GAS:
                                   Q 1 4 PIPE SHOP MAIN TOOL ROOM
                                                                                                                                  PHYSICAL AND HEALTH HAZARDS
                                                                                                                                  FIRE: SUDDEN REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHRONIC):
   CHEMICAL DESCRIPTION TRADE SECRET: Y
  CASE: 110769 CHEMICAL NAME: AMINOETHOXYETHANOL
  PURE: X HIX: SOLID: LIQUID: GAS:
   PHYSICAL AND HEALTH HAZAROS
                                                                                                                                  MAX DAILY AMOUNT: 314.0 AVG. DAILY AMOUNT: 301.0 NO. DAYS ON-SITE: 362.0
  FIRE: SUDDEN REL OF PRESSURE: REACTIVITY: IMEDIATE (ACUTE): X DELAYED (CHRONIC):
                                                                                                                                                     470.0
                                                                                                                                                                               451.0
   INVENTORY (LON/HIGH)
                                                                                                                                      STORAGE CODES AND LOCATIONS: A 2 4 WAREHOUSE 8 TOOL ROOM BIN 22
  HAX DAILY MACKET: 320.0 AVG. DAILY MACKET: 312.0 NO. DAYS ON-SITE: 364.0
                                                                                                                                                                   E 1 4 HAREHOUSE & TOOL ROOM BIN 17
                                                                                                                                                                   I 1 4 HULL 0006 AFT DECK BINS
                    349.0 341.0
                                                                                                                                                                   K 1 4 QUALITY ASSURANCE IAB
                                                                                                                                                                   M 1 4 PAINT DEPARTMENT SMALL PARTS ROOM
     STORAGE CODES AND LOCATIONS: D 1 4 PAINT DEPARTMENT SHALL PARTS ROOM
 Final
                                  E 1 4 PAINT TEST AREA
                                                                                                                                  CHEHICAL DESCRIPTION TRADE SECRET: N
                                  I 1 5 NAREHOUSE 8 TOOL ROOM BIN 17
                                                                                                                                  CASE: 1752303 CHEMICAL NAME: ACETONE THIOSEMICARBAZIDE
                                   H 1 4 DIPPING BOOTH
                                                                                                                                  PURE: X HIX: SOLID: LIQUID: GAS:
CCIENICAL DESCRIPTION TRADE SECRET: N
CCASI: 111411 CERNICAL NAME: 2-(12-MIRKETHAL) MNIKO) ETHANOL
PURE: X MIX: SCLID: LIQUID: CAS:
                                                                                                                                  PHYSICAL AND HEALTH HAZARDS
                                                                                                                                  FIRE: SUDDEN REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHRONIC):
                                                                                                                                  INVENTORY (LON/HIGH)
  PHYSICAL AND HEALTH NAZAROS
```

```
MAX DAILY AMOUNT: 62.0 AMG, DAILY AMOUNT: 53.0 NO. DAYS ON-SITE: 364.0
                    124.0
                                                                                                                                          STORAGE CODES AND LOCATIONS: D 1 4 LAMINATING EAST SHOP FLOOR
                                                                                                                                                                       D 1 4 PIPE SHOP WATER FRONT TOOL BOOTH
      STORAGE CODES AND LOCATIONS: C 2 4 PAINT DEPARTMENT SHALL PARTS ROOM
                                                                                                                                                                       D 2 4 PAINT TEST AREA
                                                                                                                                                                       E 1 4 NAREHOUSE 8 TOOL ROOM BIN 22
                                   D 2 4 LANDHATING EAST SHOP FLOOR
                                   I 1 5 NAREHOUSE 8 TOOL ROOM BIN 17
                                                                                                                                                                       E 1 4 ENGINEERING SUPPLY SHELF 17
                                                                                                                                                                       F 1 4 PAINT DEPARTMENT SHALL PARTS ROOM
                                   K 1 4 BLAST BOOTS
                                                                                                                                                                       F 1 4 DIPPING BOOTH
                                    K 1 4 PIPE SHOP WATER FRONT TOOL BOOTH
                                   L 1 4 PAINT DEPARTMENT SPALL PARTS ROOM
                                                                                                                                                                       F 1 4 WAREHOUSE 8 TOOL ROOM BIN 18
                                                                                                                                                                       I 1 4 WAREHOUSE & TOOL ROOM BIN 16
                                    H 1 4 PIPE SHOP WATER FRONT TOOL BOOTH
                                                                                                                                                                       J 1 4 HULL SS BELOW DECK GANG BOX
                                                                                                                                                                       K 1 4 MACHING TOOL ROOM
 CHEMICAL DESCRIPTION TRADE SECRET: N
 CASA: 13843599 CHENICAL HAVE: AMMONIUM BROMATE
                                                                                                                                                                       N 1 4 PIPE SHOP WATER FRONT TOOL BOOTH
                                                                                                                                                                       O 1 4 RIGGING BACK OFFICE
 PURE: X HIX: SOLID: LIQUID: GAS:
                                                                                                                                     CHEMICAL DESCRIPTION TRADE SECRET: N
 PHYSICAL AND HEALTH HAZARDS
                                                                                                                                     CASE: 0 CHEMICAL NAME: ALKALI METAL AMIDES, N.O.S.
 FIRE: SUDDEN REL OF PRESSURE: REACTIVITY: IMPEDIATE (ACUTE): DELAYED (CHRONIC):
                                                                                                                                     PURE: X MIX: SOLID: LIQUID: GAS:
 INVENTORY (LON/HIGH)
                                                                                                                                     PHYSICAL AND HEALTH HAZARDS
 MAX DAILY AMOUNT: 2113.0 AMG. DAILY AMOUNT: 2071.0 NO. DAYS ON-SITE: 362.0
                                                                                                                                     FIRE: SUDDEN REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHRONIC):
                    2641.0
                                              2589.0
                                                                                                                                      INVENTORY (LOW/HIGH)
                                                                                                                                     MAX DAILY AMOUNT: 539.0 AVG. DAILY AMOUNT: 530.0 NO. DAYS ON-SITE: 363.0
      STORAGE COORS AND LOCATIONS: B 1 4 MARRHOUSE 8 TOOL ROOM BIN 18
                                    D 2 4 PAINT DEPARTMENT SHALL PARTS ROOM
                                                                                                                                                         979.0
                                                                                                                                                                                    962.0
                                    D 2 4 HAIN TOOL ROOM
                                    F 1 4 PAINT DEPARTMENT SHALL PARTS ROOM
                                                                                                                                          STORAGE CODES AND LOCATIONS: A 1 4 PIPE SHOP WATER FRONT TOOL BOOTH
                                    O 1 4 PAINT DEPARTMENT SHALL PARTS NOOH
                                                                                                                                                                        C 1 4 ENGINEERING SUPPLY SHELF 12
                                                                                                                                                                        E 1 4 PAINT TEST AREA
 CHEMICAL DESCRIPTION TRADE SECRET: Y
                CHEMICAL NAME: ACID MIXTURES, NITRATING
                                                                                                                                                                        F 1 4 MAIN TOOL ROOM
 CASE: 0
 PURE: X HIX: SOLID: LIQUID: GAS:
                                                                                                                                                                        F 1 4 INSULATING SHOP CRIB
                                                                                                                                                                        F 1 4 RIGGING BACK OFFICE
                                                                                                                                                                        F 1 4 GASOLINE STATION NUMBER 1
 PHYSICAL AND HEALTH HAZARDS
 FIRE: SUCCES REL OF PRESSURE: REACTIVITY: IMMEDIATE (NOUTE): DELAYED (CHRONIC):
                                                                                                                                                                        K 1 4 BLAST BOOTH
                                                                                                                                                                        K 1 4 ENGINEERING SUPPLY SHELF 17
                                                                                                                                                                        Q 1 4 PIPE SHOP HAIN TOOL ROOM
 INVENTORY (LON/HIGH)
 MAX DAILY AMOUNT: 58.0 AVG, DAILY AMOUNT: 57.0 NO. DAYS ON-SITE: 364.0
                                                                                                                                     CHEMICAL DESCRIPTION TRADE SECRET: N
                                                                                                                                                 CHEMICAL NAME: ALKYLAMINES OR POLYALKYLAMINES, FLASHPOINT ABOVE 23C & BOILING POINT 35 TO 200C
                     174.0
                                                170.0
                                                                                                                                      CASE: 0
                                                                                                                                      PURE: X HIX: SOLID: LIQUID: GAS:
      STORAGE CODES AND LOCATIONS: D 1 4 PAINT DEPARTMENT SHALL PARTS ROOM
                                                                                                                                      PHYSICAL AND HEALTH HAZARDS
                                    E 1 4 PAINT TEST AREA
                                                                                                                                      FIRE: SUDDEN REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHRONIC):
                                    1 1 5 MAREHOUSE 8 TOOL ROOM BIN 17
                                    H 1 4 DIPPING BOOTH
                                                                                                                                      INVENTORY (LOW/HIGH)
EMICAL DESCRIPTION TRADE SECRET: N
                                                                                                                                      HAX DAILY AMOUNT: 87.0 ANG. DAILY AMOUNT: 38.0 NO. DAYS ON-SITE: 364.0
CONST: 0 CHEMICAL NAME: ALDERYDE, TOXIC, N.O.S.
                                                                                                                                                         131.0
                                                                                                                                                                                     57.0
NINE: X HIX: SOLID: LIQUID: GAS:
DETINGUAL AND REALTH REPORTS

TIRE, SUCCES REL OF PRESSURE, REACTIVITY, IMPEDIATE (ACUTE); DELAYED (CHRONIC);
                                                                                                                                          STORAGE CODES AND LOCATIONS: D 1 4 LAMINATING EAST SHOP FLOOR
                                                                                                                                                                        D 1 4 PIPE SHOP WATER FRONT TOOL BOOTH
PIRE SUDDEN REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHECK CONTINUENT (LOW/RIGH)

PINY DAILY AMOUNT: 382.0 AMG. DAILY AMOUNT: 287.0 NO. DAYS ON-SITE: 364.0
                                                                                                                                                                        E 1 4 ENGINEERING SUPPLY SHELF 17
                                                                                                                                                                        I 1 4 HAREHOUSE 8 TOOL ROOM BIN 16
                                                                                                                                                                        J 1 4 HULL 55 BELOW DECK GANG BOX
                                                                                                                                                                        K 1 4 MACHING TOOL ROOM
                     472.0
                                                370.0
                                                                                                                                                                        O 1 4 RIGGING BACK OFFICE
```

HMTS F

CHEMICAL DESCRIPTION TRADE SECRET: N
CAS4: 0 CHEMICAL NAME: ALLMINAM ALKAL CHLORIDE

PURE: X MIX: SOLID: LIQUID: GAS:

PHYSICAL AND HEALTH HAZARDS

FIRE: SUCCEN REL OF PRESSURE: REACTIVITY: IMMEDIATE (ACUTE): DELAYED (CHACHIC):

INVENTORY (LON/HIGH)

HUX DAILY APOUNT: 91.0 AUG. DAILY APOUNT: 86.0 NO. DAYS ON-SITE: 363.0

STORAGE CODES AND LOCATIONS: A 1 4 PIPE SIDE MATER FRONT TOOL BOOTH

F 1 4 GASOLINE STATION NUMBER 1

K 1 4 BLAST BOOTR

K 1 4 ENGINEERING SUPPLY SHELF 17

Q 1 4 PIPE SHOP MAIN TOOL ROOM

CHEMICAL DESCRIPTION TRADE SECRET: H

CAST: 7740020 CHEMICAL NAME: NICKEL HETAL

PURE: X MIX: SOLID: X LIQUID: GAS:

PINSICAL AND HEALTH HAZARDS

FIRE: X SUCCES REL OF PRESSURE: X REACTIVITY: X IMMEDIATE (ACUTE): X DELAYED (CHRONIC): X

INVENTORY (LOW/HIGH)

HAX DAILY A-DUNT: 1733.0 AVG. DAILY A-DUNT: 1649.0 NO. DAYS CN-SITE: 364.0 2016.0

STORAGE CODES AND LOCATIONS: D 1 4 MAIN TOOL ROOM

D 1 4 PAINT TEST AND

F 1 4 BUILDING 21 TOOL ROOM

K 1 4 MAREHOUSE & TOOL BOOM BIN 17

O 1 4 RIGGING BACK OFFICE

Q 1 5 ENGINEERING SUPPLY SIELF 12

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM REPORT DATE: 01/14/92 REPORT#: 66 PAGE#: 1

COMPARISON OF YARD CONTAINERS VS EQUIVALENT SYSTEM CONTAINERS

AUDIT DATE: 01/10/91

POUNDS DIFF	HMTS DEPT	POUNDS ON HAND	UNIT	QUANTITY	AREA	NTAINER#	ÇC
850.0000	0023	1000.0000 1850.0000	G G	100.0 185.0	0022 0022	000081 000081	YARD: HMTS:
0.0000	0020	214.5000 214.5000	G G	165.0 165.0	0022 0022	000082 000082	YARD: HMTS:
322.3240	0020	805.8100 1128.1340	L	25.0 35.0	0013 0013	000083 000083	YARD: HMTS:
-206.8000	0010	299.2000 92.4000	K K	136.0 42.0	0011 0011	000084 000084	YARD: HMTS:
36.2000	0010	0.0000 36.2000	P P	0.0 36.2	0021 0021	000086 000086	YARD: HMTS:
0.8000	0013	4544.0000 4544.8000	G G	1136.0 1136.2	0016. 0016	000087 000087	YARD: HMTS:
36.2000	0003	500.0000 536.2000	P P	500.0 536.2	0018 0018	000088 000088	YARD: HMTS:
8.5000	0003	62.5000 71.0000	0	1000.0 1136.0	0018 0018	000089 000089	YARD: HMTS:
5.7625	0003	62.5000 68.2625	0	1000.0 1092.2	0015 0015	000090 000090	YARD: HMTS:
1466 5065	DIEEEDENCE.	NUMB BOUNDS	200				

ABSOLUTE POUNDS DIFFERENCE: 1466.5865

NOTE: REPORT ONLY REFLECTS THOSE CONTAINERS FOUND DURING THE AUDIT.

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LOCALLY ADDED CHEMICALS

CHEM ID#: 010013 CAS#: 7740020 CHEM FORM: CHEMICAL NAME: NICKEL METAL HMIS (HEALTH, FLM49BILITY, REACTIVITY, PERSONAL PROTECTION): 3 0 1 E HFPA (HEALTH, FIRE, REACTIVITY, SPECIAL NOTICE): 3 0 1 7 TIER II(FIRE HAZARD, SUDDEN PRESSURE, REACTIVITY, ACUTE HEALTH, DELAYED HEALTH SPECIAL NOTICE): N N N Y Y CURRENT STATE: PURE: P HIX: SOLID: S LIQUID: GAS: DENSITY (G/CC): VOC'S: NON-CHEMMASTER CHEMICAL: Y

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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CONTAINERS THAT HAVE EXPIRED OR ARE NEARING EXPIRATION WRT SHELF LIFE

CMT IDS	HP IDS	PRODUCT NAME		30~60 Days Lept	0-29 Days Left		CURRENT AMT IN CNTR	UNIT	POUND
000012			·						
000039	005017	2-PIENYLPHENOL, 991	01/04/92	IEXP IR	EDI	-10	0.0	G	0.000
000032	005033	ACETYLENE	01/04/92	1EXP IR	ED I	-10	20.0	P	20.000
000033		EASTMAN POLYESTER RED 2G DYE	01/04/92			-10	0.0	G	0.000
000040	005022	124 ENMEL, HABITABILITY COLORS	01/04/92	IEXT IR	шı	-10	15.0	G	183.000
000037	005026		01/04/92	1EXP IR	ខារ	-10	0.0	P	0.000
000036		INTERCARD EPOXY	01/04/92			-10	20.0	P	20.000
000034	005028	MIL-P RED DYE	01/04/92	EXPIR	មារ	-10	0.0	G	0.000
000035	005029	COM 8361 CLEAR CROWN SILICATE	01/04/92	IEXP IR	m!	-10	42.5	G	34.000
000038	005030	POTASH SODALIME ZINC SILICATE	01/04/92	I EXP IR	ED I	-10	0.0	P	0.000
000022	005026	HD8733	01/03/92	EXPIR	ធារ	~11	300.0	P	300.000
000023	005027	INTERGARD EPOXY	01/03/92	1EXP18	ED I	~11	0.0	L	0.000
000021		INTERCLENE	01/03/92			-11	289.7	P	289.740
000024		INTERGARD EPOXY	01/03/92			-11	0.0	L	0.000
000027		COM 0361 CLEAR CROWN SILICATE	01/03/92			-11	0,0	٥	0.00
000026		COM \$361 CLEAR CROWN SILICATE	01/03/92			~11	69.0	P	69.00
000025		MIL-P RED DYE	01/03/92			~11	75.0	P	75.00
000016		NICKEL PLATED ABRASIVE PRODUCTS	01/02/92			-12	123.6	P	123.83
000010		GENETRON 113 TRICKLOROFLOURGETHANE	12/15/91			-30	0.0	G	0.00
000009	005015	NICKEL PLATED ABRASIVE PRODUCTS	12/15/91	I EXP IP	លោ	~30	0.0	P	0.00
000049	005023	GENTEX TC-60	12/05/91	EXP19	ED!	~40	45.0	P	45.00
000048	005023	CENTEX TO-60	12/05/91	1EXP 18	EDI	~40	403.9	P	403.98
000047	005020	INORGANIC GLASS	12/05/91	I EXP IP	EDI	~40	1002.0	P	1002.00
000046		INTERZINC SILICATE RED BINDER	12/05/91			~10	52.0	P	52.00
000050	005029	COM 8361 CLEAR CROWN SILICATE	12/05/91	1EXP IS	m	~10	0.0	P	0.00
800000		AQUA DIAMOND COOLANT	09/15/91	EXP IP	EDI	-121	50,0	G	65,00
000007	005018	CENETRON 113 TRICHLOROFLOUROETHANE	06/15/91	I EXCP I F	Œ)	-213	0.0	P	0.00
000044	005031	INTERPLATE RED FERRO/ZINC SILICATE	06/05/91	EXP IF	EDI	-223	1324.0	P	1324.00
000043		INTERZING SILICATE RED BINDER	06/05/91			-553	0.0	r	0.00
000045	005034		06/05/91			-223	427.0	P	427.00
000042		ANTI-FOULING BOTTOM PAINT	06/05/91			-223	543.9	C	5439.00
000041		HD0733	06/04/91		-	-224	0,0	P	0.00
300000		2-PIENYLPHENOL, 991	03/15/91			-305	143.6	G	1264.00
000031		GENETRON 113 TRICHLOROFLOURGETHANE	03/04/91			-316	0,0	P	0.00
000030		HICKEL PLATED ABRASIVE PRODUCTS	03/03/91			-317	1319.2		1319.22
000028		GENETRON 113 TRICHLOROFILOUROETIWHE	03/03/91			-317	0.0	P	0.00
000029		ANTI-FOULING BOTTOM PAINT	03/03/91			-317	0.0	G	0.00
000019		INDRGANIC GLASS	03/01/91			-319	0.0	P	0.00
000020		PBI RECYCLED LACQUER THINNER	03/01/91			-319	0.0	G	0.00
000005		INTERZINC SILICATE RED BINDER	02/05/91			-343	0.0	G	0.00
000004	005017	2-PHENYLPHENOL, 99%	01/05/91	1EXP1	um!	-374	493.1	G	4340.00

30-60 DAYS REMAINING (POUNDS): 0 0-29 DAYS REMAINING (POUNDS) : EXPIRED (POUNDS): 16796

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CONTAINERS THAT WERE MOVED OR DRAWN DOWN BY EMPLOYEES FROM INVALID DEPTS

CNT#	HPID#	PROC	AREA	EMPL	DEPT	DATE	USED POUNDS	VOC AMT POUNDS
000075 000016 000048 000079 000017 000021 000011	005015 005023 005027 005018 005025	0014 0018 0012 0014 0001	0022 0002 0001 0004 0008	3 5 6 9 14 15	0003 0004 0004 0005 0008 0008	01/10/91 01/10/91 01/10/91 01/10/91 01/10/91 01/10/91 01/10/91	7.0000 62.0000 1.0120 62.0000 53.6750 0.2595 88.0000	0.0000 0.0000 0.0134 0.1798 21.0030 0.0000 0.5368

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HAZARDOUS PRODUCTS THAT WERE USED IN AN INVALID PROCESS

000075 005031 0023 0007 3 0003 01/10/91 7.0000 0.0000 000016 005015 0014 0022 5 0004 01/10/91 62.0000 0.0000 000048 005023 0018 0002 6 0004 01/10/91 1.0120 0.0134 000079 005027 0012 0001 9 0005 01/10/91 62.0000 0.1798 000017 005018 0014 0004 14 0008 01/10/91 53.6750 21.0030 000021 005025 0001 0008 15 0008 01/10/91 0.2595 0.0000	CNT#	HPID#	PROC	AREA	EMPL	DEPT	DATE	USED POUNDS	VOC AMT POUNDS
	000016 000048 000079 000017	005015 005023 005027 005018	0014 0018 0012 0014	0022 0002 0001 0004	6 9 14	0004 0004 0005 0008	01/10/91 01/10/91 01/10/91 01/10/91	62.0000 1.0120 62.0000 53.6750	0.0000 0.0134 0.1798 21.0030

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CHEMICAL INVENTORY ON HAND + SPECIALS LIST TOTALS

CHEHIDA	CV21	DESCRIPTION	HI HI	HI	AB1 HI	AB2 HI	TOM GIA CIM	CIH CUL RI
000002	9000015	ACACIA	0	0	0	٥	0	٥
000003	83329	ACENAPICTICALE	o o	0	0	0	86	173
000005	75070	ACETALDEHYCE	0	0	0	٥	0	٥
000009	64197	ACETIC ACID, GLACIAL	0	0	0	0	336	504
000026	50782	ACETYLSALICYLIC ACID	0	0	0	0	1776	2131
000029	2429803	C.I. ACID ORANGE 45	0	0	0	0	49	62
000031	3567655	C.I. ACID NED 85	0	0	0	٥	2041	2154
000034	107028	ACROLETH	0	0	336	0	168	336
000037	107131	ACRYLONITRILE	0	0	0	0	0	Q
000039	50760	ACTINOMICIN D	0	0	0	0	0	٥
000040	124049	ADIPIC ACID	0	0	G	0	184	551
000041	23214928	ADRIANCIN	0	0	٥	٥	0	

REPORT TOTALS: 0 0 336 0 4640 5911

HMTS can be a useful tool for a shipyard that needs to track the locations and quantities of hazardous chemicals. It supports SARA requirements, is user friendly, addresses the particular needs of a shipyard and can be easily modified to reflect changes in local, state or federal regulations.

Other computer programs on the market were carefully studied to evaluate their suitability for hazardous materials tracking. All of the products evaluated were found to be deficient in one or more areas, including but not limited to MSDS data entry and retrieval, location tracking, chemical database, SARA compliance and user interface. For example, a particular program may be suitable for tracking the current locations of hazardous materials but will not have facilities for product use histories. HMTS was designed to incorporate the best features into one package.

While HMTS is theoretically a very good tracking and reporting system, the real test will be when it is implemented at a real shipyard. This will involve careful re-evaluation of bar code scanner requirements, label requirements and possible changes to database definitions, but the long-term benefits to a shipyard will be remembered long after the implementation process is forgotten.

While the key information from an MSDS can be entered into HMTS, there are many other fields on the MSDS that would be useful to a shipyard manager if they were available in a timely and accurate manner. These data fields could be added with very little programming effort. Only one or two sets of hard copy MSDSS are being maintained at most shipyards; if an image of the MSDS was available on-line (even as a stand-alone program module separate from HMTS), shipyards would benefit tremendously knowing that all MSDSs were up to date and that the actual image of the MSDS would be available at any PC terminal with graphics capability.

Other future enhancements to HMTS might include hazardous waste and manifest tracking, employee training and waste minimization analysis.

As HMTS was being completed, the HMTS scanning module was underway. It is strongly advised that the user refer to the Hazardous Materials Tracking System Scanning Module final report for detailed information on HMTS's MSDS scanning capability.

When implemented, this product will improve the tracking of hazardous chemicals in the shipyard environment. This use of computers in the shipyard to solve complex problems uses leading-edge technology to solve today's environmental headaches. Consequently, a shipyard can resolve the hazardous chemical tracking issue and concentrate their resources on other profit-making operations.

- Clansky, K. and Graber, K., eds., <u>Chemical Guide to SARA Title III</u>, Roytech Publications Inc., Burlingame, California, 1989.
- Info World, Analyzing Relational Databases, January 8, 1990, pp. 51-68.
- Information Center, <u>Basic Data Modeling</u>, September 1988, pp. 30-39.
- INTERMEC Corporation, <u>An Introduction to Bar Code Symbology</u>, Lynnwood, Washington, 1989.
- Jessup, J. and Rogness, J., <u>Approaching Shipyard Shop Floor Control Using IDEF System Analysis Tools</u>, SNAME 1990 Ship Production Symposium, Milwaukee, Wisconsin, August 23, 1990.
- Johnston, D. and Schoenleber, D., <u>Solving SARA Compliance with Computerized Hazardous Materials Tracking</u>, SNAME 1990 Ship Production Symposium, Milwaukee, Wisconsin, August 23, 1990.
- Manufacturing Systems, <u>Redesiming the Coxmoration with IDEF's Help</u>, December 1988, pp. 26-31.
- PC Magazine, <u>Multi-User Databases</u>: The Art of Simultaneous Access, September 26, 1989, pp. 105-148.
- PC Week, Relational Databases Have Programming Prowess, August 20, 1990, pp. 67-71.
- State of California Air Resources Board, <u>Technical Guidance Document to the Criteria and Guidelines Regulation for AB-2588</u>, Sacramento, California, August 1989.

Appendix A: Hardware and Software Requirements

If you have any questions, contact:

HMTS Support Insight Industries One Insight Drive Platteville, WI 53818 (608) 348-8815

ITEM	DESCRIPTION	APPROXIMATE COST
Host Computer	286 or 386 IBM PC or Compatible with 640K of RAM (minimum of 1 MB of Extended Memory and 130 MB Hard Disk is suggested, depending on the number of MSDSs)	\$1,100-2,500
Bar Code Scanner and Bar Code Printing Software	Worthington Tricoder	\$2,095
Video Monitor and Card	HERC, CGA, EGA, VGA or Super VGA, color or monochrome	\$150-750
Laser Printer	Hewlett-Packard LaserJet III or compatible with at least 1 MB of RAM	\$2,500
Dot Matrix Printer	Epson-compatible printer in 9 or 24 pin is suggested	\$225-625
Chemical Database	CHEM Master Database from Envirogenics, Inc. (SPECIAL HMTS USERS PRICE) 1-800-543-2064	\$200
Host Relational Database Management Software	TEAM-UP from Unlimited Processing, Inc., 8647 Baypine Road, Suite 208, Jacksonville, FL (904) 731-8330 (Single User to 10-Workstation Multi-User)	\$795-1,990

Appendix B: Acknowledgements

Insight Industries, Inc. would like to thank the following individuals and corporations for their assistance in making HMTS a reality:

Mike Alexander, Wal-Mart Stores, Platteville, Wisconsin Dana Austin, Southwest Marine, San Diego, California Dennis Carpenter, Advance Transformer, Platteville, Wisconsin T. Michael Chee, NASSCO, San Diego, California Doug Fitzsimmons, Fend-All Co., Platteville, Wisconsin Lyn Haumschilt, NASSCO, San Diego, California Hempel Marine Coatings USA, Rutherford, New Jersey Gary Higgins, Peterson Builders, Inc., Sturgeon Bay, Wisconsin International Paint, Inc., Union, New Jersey Don Johnston, Peterson Builders, Inc., Sturgeon Bay, Wisconsin Frank Kalb, Mercy Hospital Electrical Dept., Dubuque, Iowa Charles Nachtman, Barnstead-Thermolyne, Dubuque, Iowa Pro-Line Paint, Inc., San Diego, California Gordon Smith, David Taylor Research Center Rocky Tiefel, Mercy Hospital Carpentry Department, Dubuque, Iowa John Williams, David Taylor Research Center

Appendix C: IDEF Diagrams

The following select IDEF diagrams show how the IDEF process can be used to explain all levels of detail within a system. The frost diagram explains the overall constraints involved in managing HMTS. The second diagram explains the system details as it pertains to the generation of system reports, supplying supporting data and integrating system hardware/software. The third diagram zeros in on the checking-in of hazardous material containers. Inputs and outputs of each operation are detailed. As an additional example of this technique, the process of identifying a hazardous product is explained.

READER DATE CONTEXT: DATE: 3/5/90 WORK ING USED AT: AUTHOR: Bob Bryla X DRAFT PROJECT: HAZWAT/NASSCO REV: 1.1 RECOMMENDED PUBLICATION NOTES: 12 3 4 5 6 7 8 9 10 Gov 't Computer Personne I Reas. Network Competence C1 11 Haz. Prod. Amts Manage Hazard Productions 12 Haz. Prod. Loc Tracking & Reporting Data Inventory/Usage Reports 13 Haz. Prod. Composition М1 Chem.

USED AT:	AUTHOR: Bob Bryla	DATE: 3/5/90	WORKING	READER	DATE	CONTEXT:

X DRAFT

RECOMMENDED

PUBLICATION

M2

Computer Network

TITLE: Manage Haz. Products Tracking & Reporting Data

REV: 1.1

Attributes

Personne I

NUMBER: 1111HN1

Text:

NOOE: HAZ/A-0

Hazardous Products Composition (13) consists of a.) container type & units; b.) information from original label on container;

c.) MSDS for this product.

PROJECT: HAZMAT/NASSCO

NOTES: 1 2 3 4 5 6 7 8 9 10

1. Purpose: Define the steps for an improved HAZMAT Tracking System. 2. Viewpoint: Plant Manager (Env. Mgr.)

> Inventory/Usage Reports (01) includes internal and external requested reports; routine daily/monthly/yearly inventory reports: automatically generated reports based on inventory amounts.

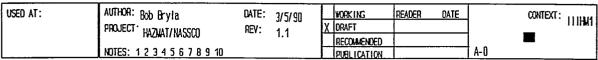
Glossary:

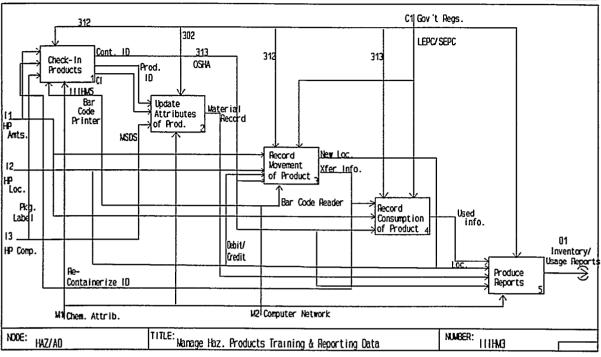
Hazardous Product - a substance consisting of one or more hazardous chemicals as defined by various regulatory agencies.

Chemical Attributes - individual chemical characteristics from a chemical database including but not limited to reactivity, health hazards, regulatory amounts, formulas, and so on.

Personnel competence - various levels of education and computer literacy (in lieu of training) may restrict the functionality of various tasks in the system or may force sub-functions to other parts of the system

TITLE: Wanage Haz. Products Tracking & Reporting Data NODE: HAZ/A-OTG 11111112





USED AT:	AUTHOR: Bob Bryla	DATE:	3/5/90		WORKING	READER	DATE	CONTEXT: Hub
	PROJECT: HAZMAT/NASSCO	REV:	1.0	X	DRAFT			
		_	1.0		RECOMMENDED			
	NOTES: 12345678910				PUBLICATION			AO

Text:

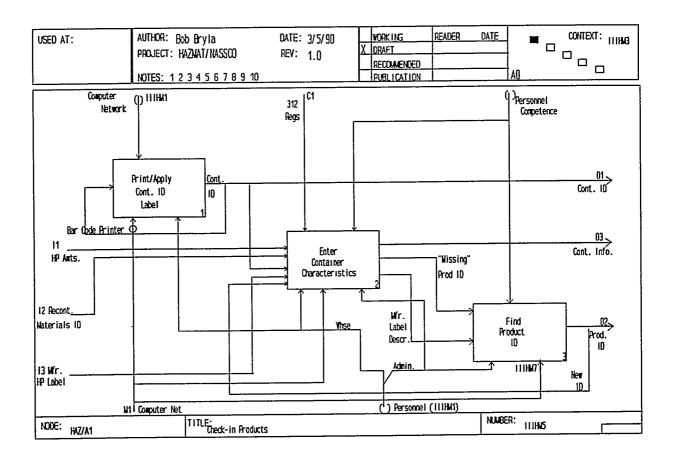
"Hazardous Products" is abbreviated "HP" for clarity.

"Material Record" contains: Product 10, MSDSF, Chemical Composition, amounts, etc.; i.e. the attributes of a product.

"CI" = "Container Info" - Unknown (new) product encountered. Information on container label entered into "I don't know" field in container record.

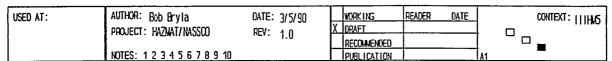
Computer Network (N2) would go to all functions; for the sake of a diagram clarity, only those functions carried out by specialized equipment are shown.

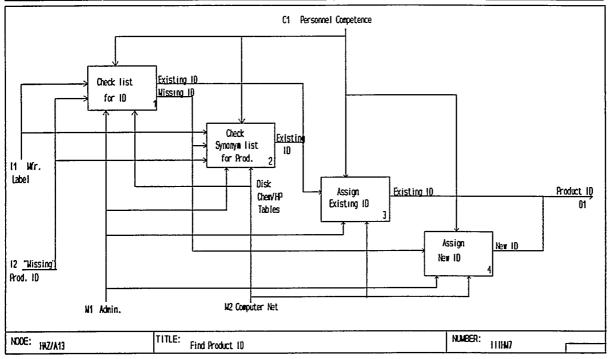
TITLE: Hanga the Bradute Trading & Boarting Date	NUMBER:
	TITLE: Warage Haz. Products Tracking & Reporting Data



	PROJECT: HAZMAT/NASSCO	DATE: 3/5/90 REV: 1.0	X DRAFT RECOMMENDED	 ——	CONTEXT: HM
	NOTES: 1 2 3 4 5 6 7 8 9 10		PUBLICATION	A1	
Text:					

"Mfr. HP Label" is the external label (if any) attached to the container by the manufact NUMBER: 111HM6 TITLE: Check-In Products NOOE: HAZ/A1TG





USED AT:	AUTHOR: Bob Bryla	DATE:	3/5/90		WORKING	READER	DATE	CONTEXT: 111HA
	PROJECT: HAZWAT/NASSOO	REV:	1.0	Χ.	DRAFT			11170
			1.0	L	RECOMMENDED			
	NOTES: 12345678910			L	PUBLICATION			A13

Text:

This set of functions is performed in the "front office" after all efforts by the marehouse staff to locate a product 10 have failed. The product may be on the list in the wrong place, overlooked, or may not exist (a new product). If the product is new, a new product 10 is assigned and the NSOS informatino can be assigned at a later time. Daily reports will indicate containers without a product 10 or without the necessary product attributes.

NOOE: HAZ/A13 TITLE: Find Product 10 NOABER: 111HAS

Overview

HMTS was designed to be easy to use, yet powerful. All data application screens have help screens associated with them. The data entry fields are thoroughly edited to ensure the information that is tracked by HMTS is as accurate as possible.

Installation

HMTS is available on high (1.2MB) or low (360K) density 5 1/4" disks or high (1.44MB) or low (720K) density 3 1/2" disks. At least two megabytes of free disk space is required before installing HMTS. No matter what size disk is used, HMTS is installed with the following command:

(SOURCE DRIVE): INSTALL (DESTINATION DRIVE) (SOURCE DRIVE)

Example A:INSTALL C A

This command would install HMTS on drive C from drive A. Note: Colons are used after the destination drive and the second reference to the source drive.

The operator is prompted for additional disks if needed.

HMTS can be installed on the drives C, D, E or F.

TEAM-UP will require that the command FILES=20 (minimum of 20) be specified in your config.sys.

The TEAM-UP system files will be installed in \USR\TEAMUP.

TEAM-UP will be delivered to the NSRP in a demonstration mode. All menu options will run except those that rely on purchased software. In the situation where purchased software is invoked from the menu, a message will instruct the user that the option selected can not run due to missing software. The demonstration version restricts the number of records that can be entered in each application.

The base RDMS TEAM-UP is also a purchased product. Both the full and runtime versions of TEAM-UP can be purchased. In the delivered demonstration version of HMTS a file called "HMTSDEMO" will exist in the \USR\TEAMUP\ directory. The purpose of this file is to signal the user that purchased software is necessary to run certain menu options. When any of the purchased software is loaded to HMTS, the file "HMTSDEMO" should be erased. HMTS will not execute any purchased software with "HMTSDEMO" present. The full version of TEAM-UP will allow the shipyard to pursue their own development of HMTS. If a runtime version is purchased, the shipyard will be allowed to add or change reports but

will not be allowed to add or change any applications. When installing the runtime version or the full version of TEAM-UP, use the install program provided by TEAM-UP. TEAM-UP system files should be loaded in the \USR\TEAMUP directory. The HMTS files to be used with a runtime or full version of TEAM-UP must be requested from NASSCO.

HMTS specific programs will be installed in \USR\TEAMUP\HAZMAT. Several additional subdirectories will be created under the \USR\TEAMUP\ directory for the purchased software. Their names will reflect the names of the purchased software. The Tricoder files associated with BARKEY must be loaded in the \USR\TEAMUP\BARKEY directory. The Tricoder files associated with GRAPHRES must be loaded in the \USR\TEAMUP\GRAPHRES directory.

HMTS may be moved to a PC network when multi-user access is required. Although the transfer process from single user to multi-user is a copy process, great care should be taken during this operation in order to maintain data integrity. Make sure that backups are done prior to the transfer process. Multi user versions of Teamup are available for most PC networks. Use of HMTS on a network with multiple users should see very little if any degradation in performance. The user may even experience an increase in speed and performance depending upon network enhancements. Each application within HMTS will handle four billion records. Most likely the user will be restricted by hardware problems before HMTS runs out of room for more records. Note, if installing HMTS on a network, the users should all be running the same version of DOS.

Part of the installation process will copy the file COMMAND.COM located in your bootable root directory to the \USR\TEAMUP directory. If for some reason your computer does not have command.com located in your root directory, you will need to copy it to the directory listed above. If this is not done, unpredictable results may occur.

To start HMTS, type HMTS at the \USR\TEAMUP\ directory. HMTS can be installed as often as desired. If re-installing, the old directories and the respective data should be erased first on the hard drive.

Insight Industries, Inc. will be glad to help any users with installation or run-time problems. Call (608) 348-8815 and ask for HMTS Support.

Disk Caching

It is strongly recommended that some type of disk caching be used when operating HMTS. Disk caching programs are available for stand alone PCs. Most Networks already have some form of disk caching. It is a minimal investment that will increase the speed of HMTS dramatically. It is not required for the system but highly recommended.

User Security

HMTS has been developed with five levels of security (0=low -9 = hi); SUPER=supervisor level 9, MGR=manager level 7, ENVIR=environmental level 5, ENTRY = data entry level 3

and PROD = production level 1. The uppercase abbreviations are the usemames that should be typed while in at the TEAM-UP sign-on screen. The program presently has no passwords associated with the different usernames. Additional user levels of security can be added and passwords can be added by choosing option 123 on the main menu of HMTS.

The SUPER level has access to run all reports, applications and view all fields. The MGR has basically the same rights except some fields that are used for audit trail purposes will be hidden. The ENVR level has the same rights as MGR except for access to the security system. ENTRY has the same rights as ENVR except for access to the import process. Finally, PROD has the same rights as ENTRY except access is primarily restricted to viewing master data applications. As mentioned earlier, each of these levels of usernames can be changed.

Audit Trails

TEAM-UP provides for the setting up of audit trails for each application. The audit trails provide a manner in which the system operator can determine the sequence of how a problem occurred. As records are deleted and updated, the deleted record or the old form of the updated record are retained in an audit mode. These records can be removed as desired. As suggested by the consultants, several applications have this feature turned on. The applications Hazardous Product, Hazardous Chemical, Container History and Container have the audit trail option turned on. Any records deleted or updated below the SUPER level security will be retained in the audit mode. The demonstration version will not have audit trails turned on.

Record Correction

In the event that a record in an application is incorrectly entered, the SUPER usemame should be used to correct the error. This level of security can alter records with updates and deletes where these activities under other security levels are not allowed. Care should be taken when performing these type of record correction operations.

Importing CHEM Master Data

To import the CHEM Master database into HMTS, install CHEM Master into its default location, Drive:\CMSDATA. The CHEM Master data must be installed on the same drive as HMTS. Once the CHEM Master data has been installed go into the HMTS program and run option 121 on the HMTS main menu.

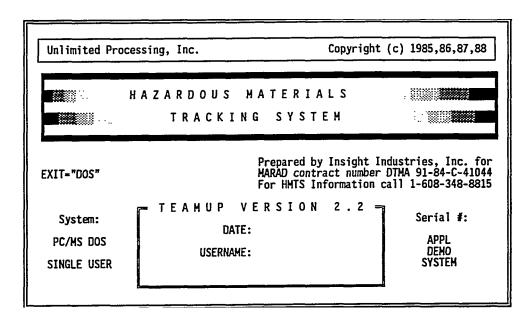
The import process is quite lengthy. It may take several hours to import the data and run the necessary batch files that convert the data so that it may be used in the HMTS program but it is a seldom run operation and thus acceptable. WARNING. If the CHEM Master database is re-imported or a new CHEM Master database is imported, any locally added chemical or synonym information will be replaced by the imported CHEM Master records. Before running the CHEM Master import feature full backups should be made of HMTS. Also, the user should run option 67 in order to note the chemicals that have been added locally. The

local chemicals should be checked against the new CHEM Master chemicals to see if they are still missing. If the chemicals do not appear in the CHEM Master database, the chemicals should be re-centered.

The CHEM Master import for HMTS has been written for the Winter 1988-1989 version of CHEM Master. If importing a different release, the import program may have to be modified.

HMTS Menu Options

The Sire-On Menu is the first screen displayed when starting HMTS. The usernames mentioned in the system security section should be used to enter HMTS.



The Main Menu is six pages deep. Page one and two contain applications that can be called from the menu. Page 35 ontain~ reports that can be generated. Page six contains utility options.

Application Characteristics

In the applications that follow there are several characteristics that will be common to all applications no matter which application the user is in.

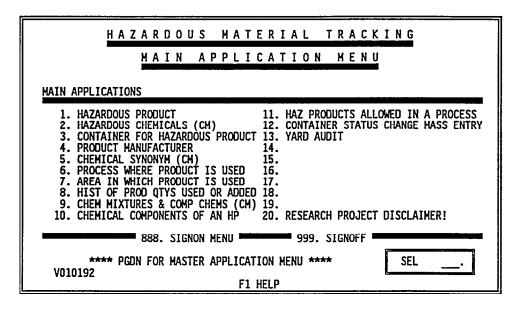
As records are entered, many validation routines occur. These checks are performed in order to maintain a "clean" database. For example, typical items that will be checked will be employee numbers, contract numbers, hull numbers, hazardous product identification numbers, etc. The checking process consists of accessing master applications and performing a search to see if the hull number, area, etc. are present. In all cases if the data is invalid a window will pop up listing the valid choices. If a user wishes to review what the valid choices are from a master application prior to committing a record, press a [CTRL][G] to view the appropriate related master application. In the event that the record is found,

descriptions and other data will be brought in to the current application and displayed on the screen. Also, as the code determines that no errors are found, it will proceed to process the remainder of the procedures.

Another task that is performed is the process of checking the child application for the existence of a record before it is deleted in a parent record. If this situation exists HMTS will advise the user to delete the child records before it allows the parent record to be deleted.

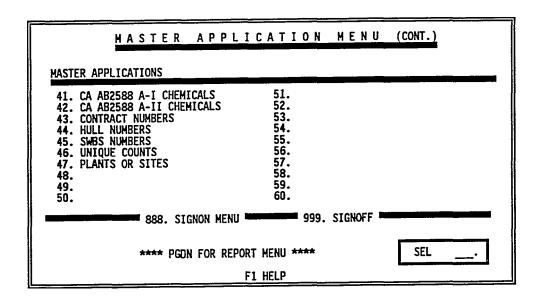
In the situation where you need to enter a record in an HMTS application and you are being forced to enter a field that is mandatory, it is suggested that in the related application associated with the mandatory field, that you enter a "unknown" record. Consequently, the unknown record can be chosen an the when you have more time you can clear up the problem.

These tasks will be found to work the same in all HMTS applications.



The Master application menu contains reports that are merely raw data dumps of each application. These reports have been supplied so that the user can always print the data out in a hard copy format and perform necessary reviews. Master reports contain very little logic. The (CH)s that are found on the main menu refer to applications that receive CHEM Master data.

MASTER APPLICATION MENU MASTER APPLICATIONS	
21. HAZARDOUS PRODUCT MARINE CTG 22. MARINE CTGS VOC LIMIT CATEGORIES 23. STORAGE TYPE 24. HMIS PERSONAL PROTECTION INDEX 25. HMIS HAZARD INDEX 26. NFPA REACTIVITY 27. NFPA SPECIAL NOTICE 28. NFPA HEALTH HAZARDS 29. NFPA FIRE HAZARDS 31. TEMPERATURE CONDITION 32. TIER II REPORTING RANGES 33. CONTAINER UNIT 34. COMPANY DATA 35. DEPARTMENTS 36. EMPLOYEES 37. SECTION 302 CHEMICALS (CM) 38. SECTION 304 CHEMICALS (CM) 39. SECTION 313 TOXIC CHEMICALS (CM) 30. PRESSURE CONDITION 40. OSHA HAZARDOUS CHEMICALS (CM)	-
888. SIGNON MENU 999. SIGNOFF	_
**** PGDN FOR MASTER APPLICATION MENU (CONT.) **** F1 HELP]



The following pages explain the options of the Main Menu. Each table will have a listing of the search fields.

Data Entry Sequence

As data is entered 'into HMTS, theuser should review which applications need to have data entered first. The following sequence will instruct theusertofirstload the "Minor" applications and then the Major applications:

- 1. Plants or Sites
- 2. Unique Counts
- 3. SWBS Numbers
- 4. Hull Numbers
- 5. Contract Numbers

- 6. CA AB2588 A-II
- 7. CA AB2588 A-I
- 8. Departments
- 9. Employees
- 10. Company Data
- 11. Container Unit
- 12. TIER II Reporting Ranges
- 13. Temperature Condition
- 14. Pressure Condition
- 15. NFPA Fire Hazard
- 16. NFPA Health Hazard
- 17. NFPA Special Notice
- 18. NFPA Reactivity
- 19. HMIS Personal Protection Index
- 20. HMIS Hazard Index
- 21. Storage Type
- 22. Marine Coating VOC Limit Categories
- 23. Hazardous Product Marine CTG
- 24. Product Manufacturers
- 25. Hazardous Products
- 26. Hazardous Chemicals
- 27. Area in Which a Product is Used
- 28. Process Where Product is Used
- 29. Hazardous Products Allowed in a Process
- 30. Chemical Synonyms
- 31. Chemical Mixtures and Component Chemicals
- 32. Chemical Components of a Hazardous Product
- 33. Section 302 Chemicals
- 34. Section 304 Chemicals
- 35. Section 313 Toxic Chemicals
- 36. OSHA Hazardous Chemicals
- 37. Container used for Hazardous Chemicals

If this sequence is followed, the user should not experience "Child" related application problems when entering the data.

Hazardous Product

F HP HAZARI	DOUS PRODUCT
HAZARDOUS PRODUCT ID NUMBER: MANUFACTURER'S TRADE NAME: MANUFACTURER'S ID NUMBER:	(AUTO FILL) IMAGE AVAILABLE:
HMIS HEALTH: HMIS FLAMMABILITY: HMIS REACTIVITY: HMIS_PERSONAL PROTECTION:	NFPA HEALTH HAZARD: NFPA FIRE HAZARD: NFPA REACTIVITY: NFPA_SPECIAL NOTICE:
FIRE HAZARD: (SUDDEN RELEASE OF PRESSURE: (UNSTABLE REACTIVE: (Y/N) ACUTE HEALTH HAZARD: (Y/N) Y/N) DELAYED HEALTH HAZARD: (Y/N)
TRADE SECRET: (Y/N) SOLID/LI DENSITY: DENSITY UNIT VOC_AMT: VOC_UNIT	QUID/GAS: . (S/L/G)
F1≍HE	LP ESC=EXIT
F=Find E=Enter U=Update D=Delete	CTRL; L=ADD CHEM CMPNNTS, W=IMAGE MENU

The Hazardous Product application issued to maintain alist of all the hazardous products thatyouhaveonhand oratonetimehad onhand. Each record contains information about a specific product.

<u>Prod. ID#</u> A 1-6 digit identification number that you give to each product to uniquely define it. When you perform a [CTRL][E], the next available number will be entered into this field as a default.

<u>Image Available</u> A one character field that identifies whether a hazardous product has a scanned image available or not.

<u>Trade Name</u>: The name that the manufacturer has given to this product. This field can be up to 40 characters long.

<u>Manufacturer</u>: The identification number of the manufacturer of the product. After entering the ID number, the manufacturer's name and telephone number will be displayed on the same line.

<u>SARA Hazard Classes</u>: The next five fields require you to enter either Y(es) or N(o) as to how the product is classified by the Superfund Amendments and Reauthorization Act (SARA) in each of the five classes: Fire, Pressure, Reactivity, Acute Health Hazard or Delayed Health Hazard.

<u>Trade Secret?</u>: Enter Y or N whether the manufacturer considers this product or any part of it to be a trade secret and, therefore, does not publish the complete list of chemicals found in the product.

Sol./Liq./Gas: Enter a S, L or G if the product is a solid, liquid or gas respectively.

<u>Dens</u>: You need to enter the density of the product to allow HMTS to compute the number of pounds of material used. The density must be entered in one of two formats: grams per liter or pounds per gallon.

Spec Grav: The specific gravity maybe entered in place of density. If this happens, the equivalent density will be calculated based on the density of water, 8.34LBS/GAL. If the density is entered, it will over-ride any specific gravity amount no matter its value.

<u>VOC</u>: Enter the amount of Volatile Organic Chemicals released per amount used. The VOCs must be entered in one of two formats: grams per liter or pounds per gallon.

<u>NFPA</u>: In the center of the form are the entry fields for National Fire Protection Association (NFPA) classification system. You enter the codes defined by NFPA for each of four categories: Health Hazard, Fire Hazard, Reactivity and Special Notice. A display field describes what the code means for each of the categories.

<u>HMIS</u>: Down the right side of the form you have the entry fields for the Hazardous Materials Identification System (HMIS). Enter the codes as defined by HMIS for each of four categories: Health, Flammability, Reactivity and Personal Protection. A display field describes what the code means for each of the categories.

At the bottom of the form are two control function keys. [CTRL] [W] takes you to the menu that allows you to scan, print and display on the screen exact copies of your MSDSs. [CTRL] [L] is used to enter the chemical components of a hazardous Product.

Care should be taken when updating the Hazardous Product application. Changing densities or density units must also be addressed in the History and Container applications.

Hazardous Chemicals

F CHEM HAZARDOUS CHEMICALS
CHEMICAL ID NUMBER: (AUTO FILL) CAS NUMBER: CHEM FORMULA: COMMON CHEMICAL NAME:
HMIS HEALTH: . NFPA HEALTH HAZARD: . HMIS FLAMMABILITY: . NFPA FIRE HAZARD: . HMIS REACTIVITY: . NFPA REACTIVITY: . HMIS_PERSONAL PROTECTION: NFPA_SPECIAL NOTICE:
FIRE HAZARD: (Y/N) ACUTE HEALTH HAZARD: (Y/N) SUDDEN RELEASE OF PRESSURE: (Y/N) DELAYED HEALTH HAZARD: (Y/N) UNSTABLE REACTIVE: (Y/N)
PURE: . MIX: . (P/M) SOLID: . LIQUID: . GAS: . (S/L/G) DENSITY G/CC: (SPEC GRAV FOR LIQS & SOLS) VOCS: (Y/N)
F1=HELP ESC=EXIT NON CHEMMASTER: F=Find E=Enter U=Update D=Delete

The Hazardous Chemicals application is used to maintain a list of all the chemicals that may be found in any of the products that you have on hand, have had on hand or will have on hand. The chemicals may be entered through this screen to build the list or the Import program may be used to build the list. Chemicals can be added through this screen at any time.

<u>Chem. ID#</u>: A 1-6 digit identification number that you assign to uniquely define each chemical. CHEM Master makes use of Chemical ID#s less than 10,001. Consequently, if the user wishes to add a chemical that he cannot find in CHEM Master, the Chemical ID# should be greater than 10,001.

<u>CASNo</u>: Enter the number assigned to this chemical by the Chemical Abstract Service.

Name The common chemical name; can be up to 60 characters.

Density: The density of the chemical in grams per cubic centimeters. **Note: The density entered will not be used for calculating Tier II reports. Densities entered in the Hazardous Product application are used for all Tier II reports.**

<u>Type</u> Defines if this is a pure chemical or a mixture of several different chemicals.

<u>VOCs</u>: Enter Y or N whether this chemical is listed as releasing VOCs. **Note: This** flag does not affect the history file in the way that it calculates amount of VOCs emitted to the environment. The VOC amounts found in the Hazardous Product application are used for the Routine Emissions report.

Container for Hazardous Product

F CONTA CONTAINER FOR HAZARDOUS PRODUCT QTY#EQ:
CONTAINER ID NUMBER: . #MULT CONTAINERS: CONTRACT: . HULL: . SWBS: DEPT: HAZARDOUS PRODUCT IN THIS CONTAINER: DESCRIPTION OF UNKNOWN RECEIVED PRODUCT
QTY CURRENTLY IN CONTAINER: UNITS OF AMOUNT ENTERED: STORAGE CONTAINER TYPE: STORAGE PRESSURE TYPE: STORAGE TEMPERATURE TYPE: .
DATE PRODUCT RECEIVED OR PUT IN CONTAINER: //. DATE ENTERED: //. DATE CONTAINER OPENED: //. DATE CONTAINER RETIRED: _/_/. DATE PRODUCT EXPIRES: _/_/
ASSIGNED PLANT OR SITE: ASSIGNED AREA FOR THIS CONTAINER: ASSIGNED PROCESS FOR THIS CONTAINER: UPDATED OR ENTERED BY: .
F1=HELP ESC=EXIT
CTRL: F=FIND,E=ENT,D=DEL,J=MLT ENTRY,K=SHOW

The Container for Hazardous Product application is used to maintain a list of the containers used to store the various products.

<u>container ID#</u>: A 1-6 digit identification number that you assign to uniquely define each container. When you do an add, the next available number will be entered into this field as a default.

<u>#Mult Containers</u>: The number of multiple identical containers the user wishes to enter.

Contract: The contract number associated with the container.

Hull: The hull the container was ordered for.

SWBS: The ship work breakdown structure category assigned.

Dept: The Department that the container is currently assigned to.

<u>Container Oty.</u>: The amount of the product remaining in the container. This field is also updated automatically from Inventory.

Unit Code: A single character code that represents the unit of measurement of the amount in the container. A display field will list what the code represents. A minitable is available.

<u>Product ID#</u>: The Hazardous Product ID number of the product in the container. The name of the product will be displayed.

<u>Current Area</u>: The ID number of the current area where the container is being kept. The Area ID, area description, department ID and department description will be displayed.

<u>Current Process</u>: The Process in which the product is currently being used. The process description will be displayed.

<u>Resin Resp Employee</u>: The ID number of the employee who is responsible for the container. The employee's first name, last name and middle initial will be displayed.

<u>Container</u>: A single character code that defines what type of container the product is in. A description of what the code means is displayed.

<u>Pressure</u> A single character code that defines the pressure at which the container is stored. A description of what the code means is dispiayed.

<u>Temperature</u>: A single character code that defines the temperature at which the container is stored. A description of what the code means is displayed.

Date Rec'd or Put in Container: The date the container was received +- 7 days.

<u>Date Entered</u>: The date the container was entered into the system.

<u>Last Container Change</u>: The date the container was last updated.

<u>Date Opened: The</u> date the container was first opened +- 7 days.

<u>Date Retired</u>: The date the container was emptied +-7 days.

<u>Date Expires</u>: The date after which the product cannot be used. If a product will not expire such as alloy steals, a date of 99/99/99 may be entered. If the expiration date is left blank, a default value of two years will be entered +- 7303 days.

The Container application allows the entry of multiple identical records. The records will vary only in the container ID number. Each subsequent container will have a container ID number higher by one. An example of when to use this option would be when a four gallons of paint are received. The individual cans are identical and likewise the information entered in the container application will be identical except for the container ID number. To use the option, enter the data for the first record including the number of multiple containers. Use a CTRL J to enter the multiple records. The CTRL J must be used instead of a CTRL E.

The Container application does not allow updates except for the MGR and SUPER usemame security levels. A great deal of care must be taken not to change the container quantities or the history records may not match the container balance. On the other hand, if a Department

or Plant ID# need to be changed, MGR and SUPER can accomplish the change without an involved change process.

If the container quantity needs to be updated by other users, the incorrect records in the history file must be deleted first. Once the history files are deleted, the container record can be updated. As mentioned earlier updates are not allowed. The manner in which a container would be updated is as follows: first, delete the record; next, while data is still on the screen make the necessary changes; finally, enter the record.

All containers must be frost entered in the Container application.

Product Manufacturer

F MFR	PROOUCT MANUFACTURER
	MANUFACTURER ID_NUMBER: (AUTO FILL) MANUFACTURER NAME: ADDRESS LINE 1: ADDRESS LINE 2: CITY: ST: ZIP:
	DAY PHONE: EMERGENCY PHONE#: FAX#:
:_:	F1=HELP ESC=EXIT

The Product Manufacturer application is used to maintain a list of all the manufacturers who hazardous products are purchased from. Each record contains data specific to an individual manufacturer.

<u>ID Number</u>: A 1-4 digit identification number that is automatically assigned to uniquely define each manufacturer. When you perform an add, the next available number will be entered into this field as a default.

Name You can use up to 30 characters to name the manufacturer.

Address Line 1 and 2: The mailing address of the manufacturer. Each address line may be up to 25 characters. Neither Address Line 1 nor 2 are required.

<u>City:</u> The city that the mailing address is in. Maybe up to 25 characters.

<u>State:</u> The two-character code that identifies the state of the mailing address.

 $\underline{Zip+4}$: The five-digit zip code plus the four-digit extension.

<u>Night (Emerg.) Phone</u>: A phone number to contact the manufacturer in the event of an emergency or when their offices are closed.

<u>Day Phone</u>: The phone number of the manufacturer's main office.

Fax#: Company Fax#.

Chemical Synonym

F SYN CAL SYNONYM
SYNONYM ID NUM <u>BER:</u> . (AUTO FILL) SYNONYM:
CHEMICAL ID NUMBER: .
F1=HELP ESC=EXIT
F=Find E= Enter U= Update D=Del ete

The Chemical Synonym application is used to maintain a list of common synonyms for the chemicals.

Synonym ID#: A 1-6 digit identification number that you assign to uniquely define each chemical. When you do an add, the next available number will be entered into this field as a default.

Synonym: Enter Up to 55 characters to represent the synonym.

<u>Chemical ID#</u>: The ID number of the chemical the synonym stands for. The chemical's common name will be displayed with the ID.

Chemical Synonym ID#s entered by the shipyard will be required to be greater than 50000 so that there is no cross over between CHEM Master and the yard specific Synonym ID#s.

Process Where a Product is Used

F PROC	PROCESS WHERE A PRODUCT IS USED
	PROCESS ID NUMBER: (AUTO FILL) DESCRIPTION:
F=Find E= En	F1=HELP ESC=EXIT ster U= Update D=Del ete

The Process Where a Product is Used application is used to maintain a list of the various processes that a product may be used in.

<u>Process ID&</u> A 1-4 digit identification number that you assign to uniquely define each process.

<u>Description</u>: Enter a description of the process using up to 25 characters.

Area in Which a Product is Used

F AREA	AREA IN WHICH A PROOUCT IS USED
	AREA ID NUMBER: SHORT DESCRIPTION:
	LONG DESCRIPTION:
	F1=HELP ESC=EXIT
F=Find E= E	Enter U= Update D= Del ete

The Area in Which a Product is Used application is used to maintain a list of various areas within a department where containers may be stored. Areas could be as large as a warehouse or as small as a shelf. The user can identity the area to be whatever the user wants. The Area ID number and description are displayed along with the Department ID.

<u>Area ID#:</u> A 1-4 digit identification number that you assign to uniquely define each area.

<u>Department</u>: Enter the department ID to indicate the department the area is in. The description of the department will be displayed along with the ID.

Area Description: A description of up to 30 characters to define the Area.

History of Product Qtys Used or Added

F PQUA HISTORY OF PRODUCT QTYS RCVD OR USED
CONTAINER ID NUMBER: HAZARDOUS PRODUCT ID NUMBER:
PLANT: PROCESS ID NUMBER: AREA ID NUMBER: EMPLOYEE INITIATING REQUEST: PROCESS ID NUMBER: PROCESS ID NUM
DATE PRODUCT USED OR RECEIVED:/
QUANTITY RECEIVED: (POUNDS)
QUANTITY USED: (POUNDS)
VOC EMISSIONS AMOUNT: (POUNDS)
TIME_ENTERED:: DATE_ENTERED:// USERNAME:
F1=HELP ESC=EXIT
CTRL: F=FIND, D=DELETE

The History of Product Qtys Used or Added application stores a record each time a record is entered, moved or has material removed. This application does not allow any Enter or Update. The only operation allowed is a Find or a Delete. All amounts in this application are measured in pounds.

<u>Cent ID#</u>: The container ID# assigned to the container.

<u>Hazardous Product ID#</u>: The Hazardous Product ID# of the Hazardous product in the container.

<u>Process ID#</u>: The current process that the container is assigned to.

Area ID#: The current area ID# assigned to the container.

Employee InitiatingReuuesti The employee that is moving the material or using the material.

<u>Date Product Used or Received</u>: The date the product is used or received.

<u>Quantity Received</u>: The amount received in pounds. The data comes from the Container application.

<u>Quantity Used</u>: The amount used in pounds. The data comes from the Mass entry application.

<u>VOC Emissions Amount</u>: VOCs emitted in pounds. Makes use of the VOCs amount entered in the Hazardous Product application.

As mentioned earlier, history records can only be deleted. The records found in the Container History application are created in the Mass Entry application and the Container application.

Chemical Mixtures and Component Chemicals

F CHEMCHEM	CHEMICAL MIXTURES AND COMPONENT CHEMICALS		
	CHEMICAL ID NUMBER FOR MIX <u>TURE:</u> . cAs#l: NAME1:		
	NAMEL.		
	CHEMICAL ID NUMBER FOR MIXTURE COMPONENT:		
	CAs#2: NAME2:		
	LOW PERCENTAGE IN THIS MIXTURE (PERCENT)		
	HIGH PERCENTAGE IN THIS MIXTURE (PERCENT)		
	TENDS TOWKARDS <= OR >= OF PERCENT LOW: (L/G)		
	F1=HELP ESC=EXIT		
F=Find E=En	ter U=Update D=Delete		

The Chemical Mixtures and Component Chemicals application is used to identify chemicals that are made up of other chemicals. The table will display the Chemical ID, the Chemical ID of the components and the High and Low percentages of the component chemical.

There are five data entry fields and two display fields. Chem. ID# and Comp. ID# are both chemical ID numbers for which there are mini-tables' and for which the descriptions of the chemical will be displayed. The Low and High percentages are the percentage of the chemical that the components make up.

Note: This application does not affect Tier II reporting.

Chemical Components of an HP

F HPCHEM CHEMICAL COMPO	NENTS OF AN HP
HAZARDOUS PRODUCT ID NUMBER: CHEMICAL ID NUMBER:	•
	% %
	HPCHEM:
F1=HELP F=Find E=Enter U=Update D=Delete	ESC=EXIT CTRL Y = MASS ENTRY

The Chemical Components of an HP application contains a listing of chemicals associated with each hazardous-product. The Chemical Components of an HP application will usually be accessed via a CTRL L from the Hazardous Product application.

Prod ID#:This is the hazardous Product identification number. This number is six characters in length.

Chem ID#:This is the chemical's unique identification number.

<u>LOW%</u> and <u>HIGH%</u>: Each chemical makes up a certain percentage of a product. The amount of a chemical in a product may vary, and these two fields are used to enter the range of the chemical amounts.

The Chemical Components of an HP application allows mass entry of chemical component records. The mass entry screen can be invoked by pressing CTRL Y. Twelve records may be added at one time.

Hazardous Products Allowed in a Process

F PROCHP HAZARDOUS PRODUCTS AL	LOWED IN A PROCESS
PROCESS ID NUMBER:	<u> </u>
HAZARDOUS PRODUCT ID NUMBER:	<u> </u>
	KEY PROCHP:
F1=HELP	ESC=EXIT
F=Find E=Enter U=Update D=Delete	

The Hazardous Products Allowed in a Process application is used to maintain a list of the products that are allowed in each process. The table will display the Process ID/description and Product ID/description.

Container Status Change Mass Entry

S MASS CONTAINER STATUS CHANGE MASS ENTRY						
CNT#	AREA#	PROC#	DATE	EMPL	UNIT	QTY_USED
USERNAME: PROCHPKEY: F1=HELP						
CTRL: S=SEND TO HIST APP, N=EXIT						

The Container Status Change Mass Entry application allows twelve records to be entered at one time. Its main purpose is to speed data entry by allowing the data entry person to review the last twelve records prior to committing them. All the records are sent to the Container History application. The Mass application has only one operation, [CTRL] [S]. CTRL S will send the data to the Container History application.

<u>Cnt#:</u> The container number that is losing material.

Area#: The area currently assigned to a container.

<u>Proc#:</u> The process currently assigned to the container.

Date: The date of the change. The date must beat least one day after the material was received. For example if received on 01/01/91 then the first day that material could be removed is 01/02/91. Material can be used the same day it is removed but it must still be entered as the next day. This deals with the way that HMTS calculates days on site. The window on this date field is +- 7 days.

Empl: The employee initiating the change.

<u>Unit</u>: The units of the amount of material removed.

Oty Used: The amount of material used. This may be zero in the case of when a container is just being assigned to a different area or process. The value must not be less than zero. HMTS does not allow containers to be added to. In the case of a draw-down tank, each new addition of material will be given a unique container record. It would be possible for more than one container record to be open for draw-down tanks, but this is the only situation where this technique is recommended.

A special future within the Container Status Change Mass Entry application will allow the user to quickly zero out a container without knowing the exact amount left. If the user enters "999.99" in the quantity used field, the container will be zeroed out.

Another special feature deals with discontinuing a container. If the amount used is 999.88 then the container will be discontinued. This would occur if for some reason a container was shipped out while still partially or completely full of material. This feature can also be used in draw down tanks. First, close the old container ID# and then add the remaining amount to the new amount and re-issue the a container ID#.

Although the Department is not identified in the Mass Entry application for each move or use each container is associated with a Department, and each Employee is also associated with a Department. This application will give a warning if an employee uses a container that is not assigned to his/her Department. The entry will not be prevented, simply warned. Report can be run to show which employees are using containers that do not belong to their respective Department.

Yard Audit

F AUDIT	YARD AUDIT			
	CONTAINER#: AUDIT DATE:/_/ AUDIT TIME:: AREA:			
	QUANTITY: UNIT:			
CTRL: F=FI	F1=HELP ESC=EXIT CTRL: F=FIND			

The Yard Audit application has one purpose. It is used to accept data that is collected during a yard survey. Once the data has been collected via the Tricoder, the import routine found on the utilities menu can be invoked. The data will be imported to the Yard Audit application. Next, the Yard Audit Comparison report should be run. This report will compare container amounts found during the survey as compared to the amounts found in HMTS. Once the discrepancies have been identified, corrective action can be taken. Consequently, the Yard Audit application provides the HMTS user the ability to routinely monitor the integrity of the HMTS data.

Hazardous Product Marine Coating

F HPMC HAZARDOUS PRODUCT MARINE COATING
HAZARDOUS PRODUCT ID NUMBER:
MARINE COATING CATEGORY:
F1=HELP ESC=EXIT
F=Find E=Enter U=Update D=Delete

The Hazardous Product Marine Coating application is used to identify which Marine Coating categories are associated with each hazardous chemical.

Marine Coatings VOC Limit Categories

F MCCAT	MARINE COATINGS VOC LIMIT CATEGORIES	
COATING CATEGOR	Y:	
G/LITER LIMITS AS APPLIED 9/1/89:		
COATING DESCRIP	TION:	
	F1=HELP ESC=EXIT	
F=Find E=Enter U=Up	date D=Delete	

The Marine Coatings VOC Limit Categories application is used to maintain a list of the various types of coatings used in the shipbuilding industry. The table will display the Marine Coating Category Code, a description of the category and the VOC limit in grams per liter. There are three data entry fields but no display fields. The Marine Coating Code is a four-character field that uniquely defines the record. The VOC limit is the amount in grams/liter after which a release must be reported. The description can be up to 35 characters.

Storage Type

F STYP	STORAGE TYPE	
	STORAGE TYPE CODE: DESCRIPTION:	
F=Find E=Ent	F1=HELP ESC=EXIT ter U=Update D=Delete	

The Storage Type application is used to maintain a list of the various types of containers used to store a induct. The table will display the Storage Type Code and description. Choose the record you wish to edit, and you will enter the Update/Browse Storage Type Record form. There are two data entry fields but no display fields. The Storage Code is a single-character field, and the description can be up to 35 characters.

HMIS Personal Protection Index

F HMISPPI	HMIS PERSONAL PROTECTION INDEX
PERSONAL PROTECTION REQUIRED PROTECTION	-
	F1=HELP ESC=EXIT
F=Find E=Enter U=Update	D=Delete

The HMIS Personal Protection Index application is used to maintain the list of codes used to label a product or chemical according to the HMIS category of personal protection. After the search the codes and code description are displayed. The only two data entry fields are a single-character code and a 4-row by 17-character description of the code.

HMIS Hazard Index

F HMISI HMIS HAZARD	INDEX
HAZARD INDEX: DESCRIPTION:	 •
F1=HELP E F=Find E=Enter U=Update D=Delete	SC-EXIT

The HMIS Hazard Index application is used to maintain the list of codes used to label a product or chemical according to the HMIS categories of Health, Flammability and Reactivity. After the search the codes and code descriptions are displayed. The only two data entry fields are a single-character code and a 15-character code description.

NFPA Reactivity

F NFPARE	NFPA REACTIVITY
	REACTIVITY CODE: DESCRIPTION:
13	F1=HELP ESC=EXIT r U=Update D=Delete

The NFPA Reactivity application is used to maintain the list of codes used to label a product or chemical according to the NFPA category of Reactivity Hazard. After the search the codes and code descriptions are displayed. The only two data entry fields are a single-character code and a 23-character code description.

NFPA Special Notice

F NFPASN	NFPA SPECIAL NOTICE
	SPECIAL NOTICE CODE: ABBREVIATED DESCRIPTION: DESCRIPTION:
F=Find E=Enter	F1=HELP ESC=EXIT U=Update D=Delete

The NFPA Special Notice application is used to maintain the list of codes used to label a product or chemical according to the NFPA category of Health Hazard. After the search the four-character abbreviation and a description of each code will be displayed. There are three data entry fields: single character code, four-character abbreviation and 23-character code description.

NFPA Health Hazards

F NFPAHH	NFPA HEALTH HAZARDS	
	HEALTH HAZARD CODE: DESCRIPTION:	
	F1=HELP ESC=EXIT	
F-Find E= Enter	U= Update D=Del ete	

The NFPA Health Hazards application is used to maintain the list of codes used to label a product or chemical according to the NFPA category of Health Hazard. After the search the codes and code descriptions are displayed. The only two data entry fields are a single-character code and a 23-character code description.

NFPA Fire Hazards

F NFPAFH	NFPA FIRE HAZARDS
	FIRE HAZARD CODE: DESCRIPTION:
	F1=HELP ESC=EXIT
F=Find E= Ent	r U= Update D=Del ete

The NFPA Fire Hazards application is used to maintain the list of codes used to label a product or chemical according to the NFPA category of Fire Hazard. After the search the codes and code descriptions are displayed. The only two data entry fields are a single-character code and a 23-character code description.

Pressure Condition

F PCOND	PRESSURE CONDITION
	PRESSURE TYPE CODE FOR TIER II REPORT: DESCRIPTION:
F=Find E= Enter	F1=HELP ESC=EXIT U= Update D= Delete

The Pressure Condition application is used to maintain a list of the various conditions may be required to store a container containing a hazardous product. In the data entry screen there are two entry fields: single-character Pressure Code and 35-character code description.

Temperature Condition

F TCOND	TEMPERATURE CONDITION	
TIER II TEMPERATURE TYPE CODE: - TEMPERATURE TYPE DESCRIPTION:		·
F1=HELP ESC=EXIT		
F=Find E= Enter U= Updat	e D=Del ete	

The Temperature Condition application is used to maintain a list of the various conditions that may be required to store a container containing a hazardous product. After a search the codes and code description are displayed. In the data entry screen there are two entry fields: single-character Temperature Code and 35-character code description.

Tier II Reporting Ranges

FTTRANGE	TIER II REPORTING RANGES REPORTING RANGE FOR TIER II REPORT: LOWER VALUE FOR THIS CODE: (POUNDS)
	UPPER VALUE FOR THIS_CODE: (POUNDS)
	F1=HELP ESC=EXIT
F=Find E= Ente	er U=Update D=Del ete

The Tier II Reporting Ranges application is used to maintain a list of reporting range codes specified to be used on Tier II reporting forms. The amount of a chemical on hand will fall within one of the ranges. Each range will have a unique code.

Container Unit

F UNIT	CONTAINER UNIT	
	CONTAINER UNIT CODE:	
	UNIT DESCRIPTION:	
	FACTOR TO CONVERT TO GALLONS: .	
	FACTOR TO CONVERT TO POUNDS: .	
	F1=HELP ESC=EXIT	
F=Find E= Ente	er U= Update D=Del ete	

The Container Unit application is used to maintain a list of the various units of measurement used to indicate the amount of a product in a container. The table will display the Container Units Code and a description of the units. There are four data entry fields but no display fields.

<u>Unit Code</u>: A single-character field used to uniquely identify the record. Can be up to 35 characters.

<u>Unit Description</u>: Description of the container unit.

<u>Factor to Convert to Gallons</u>: If the material is a liquid, this is the factor used to convert the material from a measurement other than gallons to gallons.

<u>Factor to Convert to Pounds</u>: If the material is a solid, this the factor used to convert material from a measurement other than pounds to pounds.

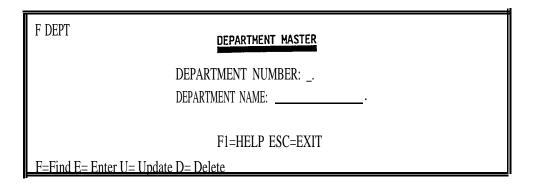
The user is warned that changes in the Unit application need to be addressed in the history file.

Company Data

F CODATA	COMPANY DATA KEY:
COMPANY: ADDRESS1 ADDRESS2 CITY	 . STATE ZIP CODE
SIC CODE: DUN &	BRAD NUMBER:
OPERATOR: ADDRESS1 ADDRESS2 CITY ZIP CODE	 STATE
EMERGENCY CONTACT PHONE NUMBER	TITLE
EMERGENCY CONTACT PHONE NUMBER	TITLE 24 HOUR PHONE
	F1=HELP ESC=EXIT
CTRL: F=FIND, U=UPDATE	

The Company Data application maintains the header information used on the Tier II report. The company data also provides the company name which is stamped in the upper left comer of every report.

Departments



The Departments application is used to maintain a list of the departments where an employee may be assigned or a container is stored.

<u>Department ID#</u>: A 1-5 character identification number that you assign to define each department.

<u>Description</u>: A description of up to 40 characters to define the department.

Employees

F EMPL	EMPLOYEE MASTER	
	EMPLOYEE NUMBER: LAST_NAME: FIRST_NAME: MIDDLE INITIAL: DEPT:	
	F1=HELP ESC=EXIT	
F=Find E=Enter \	J=Update D=Delete	

The Employees application is used to maintain a list of all employees and the department they work in.

Employee ID#: A 1-5 digit identification number that you assign to define each Employee.

Last Name: The employee's last name. May be up to 16 characters.

First Name: The employee's first name. May be up to 9 characters.

MI: The employee's middle initial.

<u>Department:</u> The department where the employee currently works.

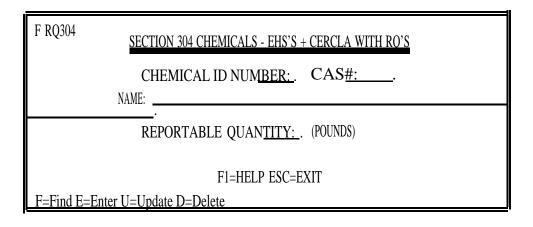
Section 302 Chemicals

F TPQ302	SECTION 302 CHEMICALS - EHS'S WITH TPO'S
	CHEMICAL ID NUM <u>BER:</u> . CAS <u>#:</u> . NAME:
	THRESHOLD PLANNING QTY - LIQ, GAS, FINE PART: (POUNDS) THRESHOLD PLANNING QTY - GENERATED SOLIDS: (POUNDS)
	F1=HELP EXIT=ESC
F=Find E= E	nter U= Update D=Delete

Under Sections 302 of SARA Title III, any facility that produces, uses or stores any of over 400 chemicals classified as extremely dangerous in amounts greater than established threshold amounts must notify state emergency response commissions.

The Section 302 Chemicals application is used to hold the chemical ID numbers of these chemicals and the Threshold Planning Quantities. The only data entry fields are chemical ID number, for which there is a mini-table. The chemical's name will be displayed. The other two fields are for the two-tier TPQ limits established by the government.

Section 304 Chemicals



Under Sections 304 of SARA Title III, any release of chemicals in excess of set amounts must be reported to local authorities. This table is used to maintain the list of reportable chemicals and the amount that a release must be before it is reported. The only data entry fields are chemical ID number, for which there is a mini-table, and the chemical's name will be displayed. The Reportable Quantity is the amount established by the government.

Section 313 Toxic Chemicals

TOX313 SECTION 313 TOXIC CHEMICALS	
CHEMICAL ID NUMBER: .	
CAS#:	
NAME:	
 ,	
F1=HELP ESC=EXIT	
E=Find E= Enter U= Update D=Delete	

Under Sections 313 of SARA Title III, the total yearly release of certain toxic chemicals must be reported yearly to the EPA and state officials. This file is a listing of all the chemicals that fall under this act. The only data entry field is chemical ID number. The chemical's name will be displayed.

OSHA Hazardous Chemicals

F 0SHA	OSHA HAZARDOUS CHEMICALS
	CHEMICAL ID NUMBER: .
	CAS#:
	NAME:
	·
	F1=HELP ESC=EXIT
F=Find E= E	Inter U= Update D=Delete

Under Sections 311 and 312 of SARA Title III, the Occupational Safety and Health Administration's (OSHA) Material Safety Data Sheet (MSDS) regulations are the trigger for Title III MSDS and chemical inventory reporting requirements. This file is a listing of all the chemicals that fall under these acts.

California AB2588 A-I Chemicals

F E2588	CALIFORNIA AB2588 A- I CHEMICALS EMISSIONS
	CHEMICAL ID NUMBER: .
	CARCINOGENIC: (Y/N)
	CAS#:
	NAME:
	
	F1=HELP ESC=EXIT
F=Find E=Ente	r U=Update D=Delete

The California AB2588 A-I Chemicals application is used to maintain a list of all chemicals that are considered Carcinogens by California AB2588 A-I. There are no search fields, and the data is filled in automatically. The table displays the Chemical Code and Y(es) or N(o). The first is the chemical ID number, for which there is a mini-table. The chemical's name will be displayed. The other is a single character, Y(es) or N(o), as to whether the chemical is a carcinogen.

California AB2588 A-II Chemicals

F P2588	CALIFORNIA AB2588 A-II CHEMICALS! PRODUCE. USE OR PRESENCE
	CHEMICAL ID NUM <u>BER:</u> .
	CARCINOGENIC: (Y/N)
	CAS#:
	NAME:
	Et HELD EGG ENVE
	F1=HELP ESC=EXIT
F=Find E-l	Enter U=Undate D=Delete

The California AB2588 A-Ii Chemicals application is used to maintain a list of all chemicals that are considered Carcinogens by California AB2588 A-II. The table displays the Chemical Code and Y(es) or N(o). There are only two data entry fields. The frost is chemical ID number, for which there is a mini-table. The chemical's name will be displayed. The other is a single character, Y(es) or N(o), as to whether the chemical is a carcinogen.

Contract Master

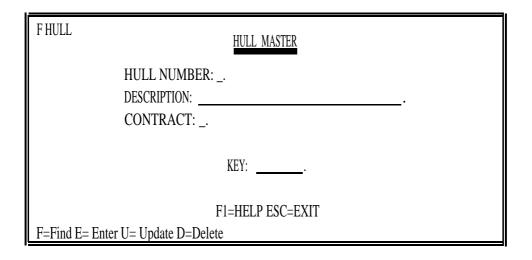
F CONT CONTRACT MASTER
CONTRACT NUMBER: DESCRIPTION: F1=HELP ESC=EXIT F=Find E= Enter U= Update D=Delete
F1=HELP ESC=EXIT F=Find E= Enter U= Update D=Delete

The Contract Numbers application should be used to differentiate containers in the shipyard with respect to contract numbers. The contract number may refer to one ship in for repair or it may reflect many ships of a multi-hull contract.

<u>Contract Number</u>: Contract number that material is assigned.

Contract Description: A 30 character description of the Contract.

Hull Numbers



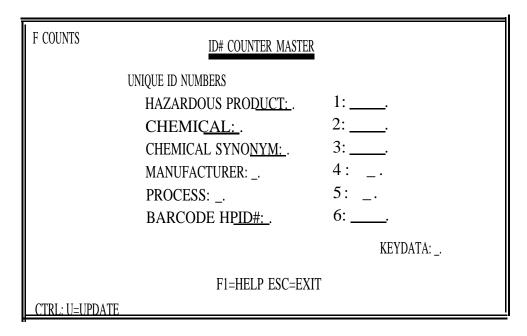
The Hull Numbers application maintains the numbers of a multi-hull contract.

SWBS Numbers

F SWBS SHIPWORK BREAKDOWN STRUCTURE (SWBS) MASTER	
SWBS NUMBER: DESCRIPTION:	
F1=HELP ESC=EXIT	
F=Find E= Enter U= Update D= Delete	

The SWBS (Ship Work Breakdown Structure) application maintains the valid SWBS numbers.

ID# Counter Master



The ID# Counter Master application is an application that only the system manager should access. This application keeps track of the next ID# to be used for several applications. The ID#s maintained by the ID# Counter application will be automatically incremented irregardless of what the user types in the ID# field.

Plants or Sites

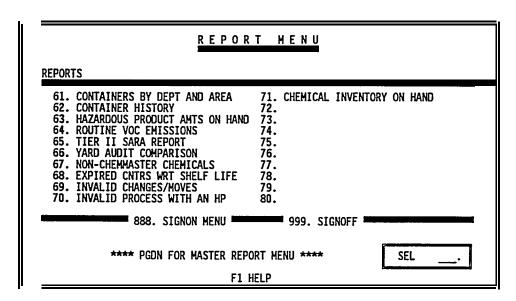
F PLANT	PLANT OR SITE MASTER				
	PLANT OR SITE: PLANT OR SITE DESCRIPTION:				
F=Find E=	F1=HELP ESC=EXIT Enter U= Update D=Delete				

The Plants or Sites application is used to maintain a list of various plants or sites within a company. The Plant identification is to be made for each container. The Plant or site is used to separate information for Tier II reporting.

Plant ID#:A 1-4 digit identification number that YOU resign to uniquely define each Plant.

<u>Plant Description</u>: A description of up to 30 characters to define the Plant.

Report Menus



Reports 61-71 are the major reports of the system. These reports should be used on a daily basis by the system users and administrators to monitor the shipyard's hazardous containers. These reports also summarize data for reporting requirements.

MASTER REPORTS 81. HAZARDOUS PRODUCT MARINE CTG 82. MARINE CTGS VOC LMT CATEGORIES 83. STORAGE TYPE 84. HMIS PERSONAL PROTECTION INDEX 85. HMIS HAZARD INDEX 86. NFPA REACTIVITY 87. NFPA SPECIAL NOTICE 88. NFPA HEALTH HAZARD 89. NFPA FIRE HAZARD 90. PRESSURE CONDITION 888. SIGNON MENU 91. TEMPERATURE CONDITION 92. TIER II REPORTING RANGES 93. CONTAINER UNIT 94. CHEMICAL COMPONENTS OF AN HP 95. CHEMICAL MIXTURES AND COMP CHEMS 96. HAZ PRODUCTS ALLOWED IN A PROCESS 97. SECTION 302 CHEMICALS 98. SECTION 304 CHEMICALS 99. SECTION 313 TOXIC CHEMICALS 99. SECTION 313 TOXIC CHEMICALS 99. SIGNOFF ***** PGDN FOR MASTER REPORT MENU (CONT.) ***** F1 HELP

MASTER REPORT	MENU (CONT.)
102. CA AB2588 A-II CHEMICALS 112 103. CONTRACT NUMBERS 114 104. HULL NUMBERS 114	3.).
**** PGDN FOR UTILITY MEN	SEL

Major Reports

Sample reports have been run foreach report menu option. Each report represents only a portion of the actual report.

Report 61: Containers by Department and Area

Report 61 lists all the containers sorted by Department and Area. This report should be handed out to Department Supervisors in order to make them aware of what hazardous containers they are responsible for. This report should be marked up by the Department Supervisor and handed into the HMTS system manager for updating.

Report 62: Container History

Report 62 lists the history of a certain container. In the event a container is lost or some other characteristic of the container is in question, this report may provide the necessary information about the container to draw the proper conclusion.

Report 63: MSDS Inventory--Products on Hand

Report 63 will calculate a total on-hand amount of each hazardous product currently loaded into the system. This type of information would be very helpful in determining ordering amounts. This report would also be helpful in performing hazardous waste minimization tasks.

Report 64: Routine VOC Emissions by Department and Area

Report 64 calculates the total amount of VOCs released when a product is used. This report should provide helpful information in completing the 313 reporting requirements. This report should also be used to help meet the intent of the Marine Coating role.

REPORT DATE: 01/17/92 REPORT#: 61 PAGE#: 1

DEFT: ONE DEEDE STEDS ABERAL COSE MUTILIDADES 21 TOOK SOOM

> CONTO PRIZOS DESCRIPTION SCHOOLS SCHOOL HIT-S SED DIE

CONTAINERS BY DEPARTMENT AND AREA

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

REPORT DATE: 01/17/92 REPORT#: 62 PAGE#: 1

CONTAINERS HISTORY FROM: 01/10/91 TO 01/31/91

RCV/CARRO DATE	CORT	PRODA	MCDCT DESCRIPTOR	CHIA/AND		THE CHEC
et URVET	000006			1 ACCESCA, MARIANA	0.0000	5,0008
		_		COMMUNE COST OFFICE	r: 17 G	Q
el\16\M	000011			15 CLACK, MEMCOR	0.0006	22,0006
		_		CRIME COS GT/OC	12 9	12
el\tr\s	80001.6	9007.00	NO METAL REPORT	S EASTVERN, CHAIG	0.0000	62.0004
		_		COMMENT COST GET/CHIC	t: 126 P	124
CIVILINE	800617			16 MODEL SHOW	0,0000	53,6754
		_		COMME COST GET/OR	T: 0 P	•
ervava	000021			15 CCACAG, MERITOR	9.0000	0,2565
		_		comment days grz/dell	230 h	300
aven.	000048			6 FEMER, MICHAEL	9,0000	1.0124
				Cases cos 641/00	T1 404 P	101
erveva	000675			3 CARRESTAL STORMAR	9,0000	7,000
				COMMINE COST GET/CHI	21 103 Q	143
etvitut	000079	000075	SK SCOVING	S INCHE, SENE	7,0000	62,000
		_		COMMITTER COST STEAM	21 738 P	738
01/18/91	0000013,				92.2000	0,000
		_		COMMENT COST OFFI ASS	12 9	12
ervever	000082				295,6710	0,000
			- 	COMMENT OF STYLE	31 12 6	296
61/18/91	000013				3.2625	0.000
		_		COMMIT COST 977/OR	m 52 0	3
el/16/85	000004				0.2277	0,000
		_		COMMENT COST OFFACE	272 144 B	•

TEST COMPANY NAME, INC. HAZARDOUS HATERIAL TRACKING SYSTEM

REPORT DATE: 01/17/92 REPORT#: 63 PAGE#: 1

HSDS INVENTORY: PRODUCTS ON HAND

147304	Description)		cost	572			MCEDIAN	CHECTLA	DATE ROMPARED
*****	Metallic Conce	ed .	*****	7	1		100.0000	8,9090	41/41/11
			999900		1	4	0.0000	0.0000	15/13/FL
			0000EL	Ŧ	1		0,0000	0,0000	61/46/Rt
			000000	r	1	4	9,0000	4,0000	01/96/96
							PRINCE TOTAL POR	M CE 1770:	199
******	1805L 1V68	ARREST PROPERTY.	******		1	4	121,2000	0.0000	65/65/95
			******	•	1	•	******	100,0000	61/96/96
			******	E	1	4	10.0000	0.0000	
			00000.5	Þ	1	4	200,0000	8,0000	62/86/98
			900000.5	D	1	4	8,0000	0,0000	41/61/91
			**********	8	1	4	4,0000	3.2546	61/61/31
			90000.6	Đ	1	4	1,0000	8.1367	82/96/9E
			000EL6	9	1	4	4,0000	2.3104	62/67/9E
			900EL5	9	1	4	4,0000	8.46TL	CL/99/9E
			900004.6	9	1	4	1.7000	62.000	62/18/7E
			******		1	3	1336.0000	0.0000	61/83/18
			000020		1	5	6.0000	0,7700	62/96/10
			000063	•	1	4	2325,6000	2,0000	62/06/20
			******	•	1	4	4.646	8,0000	CL/LEVIE
							PRODUCT SOUL ROSE	DE CE 1990:	3948
	Named and	Oct to mon	*****	ĸ	1	4	700.0000	0,000	61/61/16
			*****		1	4	500,0000	6,0000	41/41/11
			******		1	i	0.0000	404,0000	61/86/9L
			999963	I	1	4	32,0000	0.0000	41/14/14
			***************************************	Ī	1		8,0000	32,0000	41/61/61
			200005		1	i	30,0000	8,0000	46/46/31
			000078	Ē	1	4	10,4400	4,000	RL/96/96
			*****	J	1	4	25,0000	6.0000	61/14/14
			******	•	1	4	556,3000	0,000	EL/96/3E
				_			PRINCE TOTAL POS	04 64 1980 +	116
*****	3-0-00-1709-0		*****	c	2	4	(100,0000	6,0000	61./61/31
			******	c	2	4	8,0000	54.0000	61/63/RE
			******	8	1	4	1,120,0000	6,0000	61/6L/9L
			300000	0	1	4	1.000	27.9000	6L/14/7E
			000030	E	1	4	368,0000	0.9000	EL/H/M
					1		2,1000	18.0000	EL/HE/NL
			000030		1	4	1.000	954.0000	61/84/91
			444463		1	4	118.0000	0,0000	61/17/18
			******	c	1	ć	227,7000	0.000	61/1A/94
					_		PRODUCT 90004 2023		394

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

REPORT DATE: 01/14/92 REPORT#: 64 PAGE#: 1

ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA FROM: 01/01/91 TO 01/31/91

EPID\$: 005012 TRADE NAME: BARIUIN COMPOUNDS VOCS LBS/GAL 4.0000 LBS/GAL CATECORY: HARINE CONTING RULE GRAMS/LITER:

DEPARTMENT: 0029 RIGGING

AREA: 0001 PAINT DEPARTMENT SMALL PARTS ROOM

CONT DATE VOCS (LBS) 000001 01/01/91 5.0000

AREA TOTAL VOC EMISSIONS (LBS): AREA TOTAL VOC EMISSIONS (GRAMS):

DEPT TOTAL VOC EMISSIONS (LBS): DEPT TOTAL VOC EMISSIONS (GRAMS):

5 2273

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Report 65: Sara Tier II - Emergency and Chemical Inventory

Report 65 attempts to reproduce the necessary information for the Tier II reporting requirements. This report can be recreated through the year, thus giving the environmental staff an early warning with respect to the information they will be required to submit to the government on March 1 of every year.

Report 66: Comparison of Yard Containers vs. Equivalent System Containers

Report 66 works in tandem with the Tricoder recording device. After data has been collected from the yard and imported to HMTS, this report should be run. Report 66 will provide a comparison of each container with respect to HMTS amounts versus the yard audit amounts.

Report 67: Non-CHEM Master Chemicals

Report 67 lists all the chemicals that have been added by the shipyard contrary to being imported via CHEM Master.

Report 68: Expired Containers with respect to Shelf Line

Report 68 lists all containers that have a limited time remaining of their shelf life. This report is intended to help the shipyard avoid disposing of material simply because it sat on the shelf to long. This can be a very costly result, especially since the costs of disposing of hazardous material has increased dramatically.

TIER THO - EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY SPECIFIC INFORMATION BY CHEMICAL REPORTING PERIOD: 10191 TO 123191 REPORT DATE: 01/15/92 REPORT#: 65 FACILITY IDENTIFICATION OWNER IDENTIFICATION TEST COMPANY NAME, INC. 1 HARBOR DRIVE JOHN JOHNSON SAME PLATTEVILLE, WI 53818-0000 PLATTEVILLE, WI 53818-0000 SIC CODE: 5381 DUN & BRAD NUMBER: 12-123-1231 EMERGENCY CONTACT TOH JONES OPER MGR 608-348-8815 24HR: 608-348-8816 ENVR HGR 608-348-9912 24HR: 608-348-8812 BRUCE CLARK PLANT OR SITE ID: MAIN COMMONATION STATES THE CONTRACT OF CONTRAC , NO MENINT MUNIOS SECONS DEL, OF PROMICHES - ROCKETYSTES - DANSCORES (ACCRES) : DELL'AND (CORGEC) :

N 1 4 DENVENT NOW MICHAEL DESCRIPTION THOS SECRET N

CAMP 64187 COMMENT MOMENT ACTIVE ACTOR. CLACIMAL POMENT M MCXI POLINII LITYRING CAST

ATHER X NOTICES HELD ON AMERICAN: MENCENALLES THERESEARE (NOTATE) & DETYCHO (CHANGE)

DAMBERORY (LOLVICES)

| MONE DATES AND MALE DATES AND DATES CON-MITTED | 154.0 | 154.0 | 154.0 |

STORAGE CODES JOD LECKTORS: C 2 4 SAINE DESIGNATION SMALL SHARE SOON D 2 4 LIVESSWEETERS SAME SHOW FILLOW. I 1.5 SAMESHORES STOOL SOON SIZE 17 E 1.4 M LANGE SCONE SAME 17 TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM REPORT DATE: 01/14/92 REPORT#: 66 PAGE#: 1

COMPARISON OF YARD CONTAINERS VS EQUIVALENT SYSTEM CONTAINERS

AUDIT DATE: 01/10/91

c	ONTAINER#	are a	CONNTITY	UNIT	POUNDS ON HAND	HMTS DEPT	POUNDS DIFF
YARD:	000081	0022	100.0	G	1000.0000		
HMTS:	000081	0022	185.0	Ģ	1850.0000	0023	850.0000
YARD:	000082	0022	165.0	G	214.5000		
HMTS:	000082	0022	165.0	G	214.5000	0020	0.0000
YARD:	000083	0013	25.0	L L	805.8100		
HMTS:	000083	0013	35.0	L	1128.1340	0020	322.3240
YARD:	000084	0011	136.0	K	299.2000		
HMTS:	000084	0011	42.0	к	92.4000	0010	-206.8000
YARD:	000086	0021	0.0	P P	0.0000		
HMTS:	000086	0021	36.2	P	36.2000	0010	36.2000
YARD:	000087	0016	1136.0	G	4544.0000		
HMTS:	000087	0016	1136.2	G	4544.8000	0013	0.8000
YARD:	000088	0018	500.0	Þ	500.0000		
HMTS:	000088	0018	536.2	P	536.2000	0003	36.2000
YARD:	000089	0018	1000.0	0	62.5000		
HMTS:	000089	0018	1136.0	0	71.0000	0003	8.5000
YARD:	000090	0015	1000.0	0	62.5000		
HMTS:	000090	0015	1092.2	0	68.2625	0003	5.7625
					DLUTE POUNDS	0.7.0000 D1000 -	1466.5865

NOTE: REPORT ONLY REFLECTS THOSE CONTAINERS FOUND DURING THE AUDIT.

TEST COMPANY NAME, INC. HAZARDOUS HATERIAL TRACKING SYSTEM REPORT DATE: 01/14/92 REPORT#: 67 PAGE#: 1

LOCALLY ADDED CHEMICALS

CHRISTIC MARKEL CORE: T714000 CHRISTIC
CHRISTIC MARKEL MAR

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM REPORT DATE: 01/17/92 REPORT#: 68 PAGE#: 1

CONTAINERS THAT HAVE EXPIRED OR ARE NEARING EXPIRATION WRT SHELF LIFE

7 204	10° 204	PRODECT INVE		36-60 DA35 Liet			(3) (3) (3) (3) (4)	ORC ?	P036
0178		SASSON POLYSITER MID 34 DW	01/04/10			-	2.2	,	2,30
9677		DANSON POLYMENT PO 24 DR	GL/04/98			-	141.2	_	1232.66
4679		DUMONO BOCK	GL/94/36			-	732.0	•	736.00
0113		ELEDON POLYSPING MID 30 DIE	arveras			-13	0.0	•	8.60
0634		HELF-D MED DAY	E/M/M			-13	10.0	•	11.00
4432		KITTINE	ar/sr/ss			-13	20,0	,	21.00
4436		CON IDEL CROSS CHOSE SECTIONS	GL/44/10			-13	2.5	•	
9890		PORME STALING EDIC STALICHE	E/M/32			-13	10.0	,	18,00
9637		10733	GL/M/ME			+13	4.4		8,00
0130		2-manufacture, 994	6/14/12			-13	0.0	•	1.00
0636		DESIGNO SOLL	GL/M/M			-13	39.0	•	20.00
****		114 MONEY, MATERIALIZET COLORS	G_/44/98			-13	15.0	•	111.00
4005		NUL-F NED DYC	41/41/16			-14	75.0	•	75.00
****		DEMOND MOC.	66,763,798					L	8,00
****		COX EDG. CENT CHOSE SETTONS	E/0/12			-14			(7.00 L.00
0027		CON EDIT CREAT CHOICE EXTENSE	E/61/16			-16	129,0	•	
***		Descript	46,741,766			-14	290.7	•	291.70
9423		Distriction Sect.	01/03/90			-16	1.1	L	20.00
		106733	GE/63/16			-14	300.0	•	304.00
9110		NICHE PLANS ASSAURT PROJECTS	G_/62/16			-15	122,6	,	177.85
1002		SANDOR CORRESOR	GL/HL/HE			-16	100.0	,	100.00
****		NICHEL PLANS ASSAULT PRODUCTS	G/K/K			-16	37.5	•	23.2
1463		Desirate States and another	4./4./98			-16	100,6	,	104.00
****		MORE, PURE MARKET PROVIDE	12/13/10			-13	19.0	,	10.00
1016		COMMISSION 213 TRADECRAFIA COMMISSION IN	12/15/90			-13	500,0		2254.00
0017		DOMESTIC CLASS	12/46/61			-43	1942.0	,	1002.00
1000		CON EDG. CLOSE STOCKS	12/44/10			-43	6.0	,	1,00
1006		DEPARTMENT STATEMENT NO SCHOOL	12/06/93			-0	Y. 0	,	32.00
1000	0050E3	CHARTES 90-60	12/46/91			-43	6.0	,	65,00
****	0054623	CONTEXT 20:44	12/46/10			-43	405.9	,	843,96
-	005019	ACIA DENISO COLUMP	08/23/98	1000		-124	47.1		9.54
1006	06566.7	2-MINISTER, 995	08/18/92			-129	102,5	•	227.74
1007		DISSUC SACSALED SIVEL	06/18/9K			-129	301.2	7	13.E
1075		DESCRIPTION PROPERTY SELECTE	08/9E/9E			-138	103.2		103.20
9974		PET MOTOR DICTURE THORSE	04/WL/9E			-134	18.2		8,0
1007	COSCLE	CENTRON 113 TRECKERGRACIONAL	06/15/90			-216	18.0	,	10.00
1006	6056E7	DAMES BOX	96/19/9E	10.70		-271	1144.5	Ł	MLL.R
1004	005488	DICHGREC CLARE	0E/18/9E	(EDI		-223	143.5		1.2
1002	005634	EASTHOR POLYESTING THE 3G DISC	66/18/9E	IDOU		-221	12.2	•	286,07
1003	005430	PORME SCHALDE EDIC STATUTES	06/24/96			-273	52.2	•	3.34
HOUL		PRE MORCUP LACORE TRUMBS	66/16/96	1		-223	12.2		92.30
***	005002	124 BOOKS, MACHAELITY COLORS	06/99/96	IDTO		-222	35.0	Ł	1128.11
9000	00546.9	ACIA DEMOND COOLARS	05/90/35	(DFD		-222	16.0	c	214,30
1004	60561.8	OPERAGE 113 TRICKERSTANDAMENT	05/05/93	1000		-272	4.0		12,00
9967	005433	DESIGNATE NO PROPERTY SELECTE	66/96/1R	100		-225	18.5		5.25
***	005434	DATEME POLICES NO SC DIE	KAKAR.	1000	-	-225	1065_3		2.34

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Report 69: Containers Used by Employees of a Invalid Department

This report 1 ists the employees that have used material from containers that do not belong to the department of the employee.

Report 70: Invalid Process With an Hazardous Product

HMTS will allow data entry of container usage by unapproved processes. Data entry is not curtailed by this action. But, a report can be run which identifies which processes were used on incorrect hazardous products.

Report 71: Chemical Inventories on Hand

This report lists pounds of chemicals on hand in the shipyard. The report totals the pounds of chemicals falling under the lists Toxic 313 Chemicals, OSHA Chemicals, and AB2588 lists I and II Chemicals. High percent totals are also calculated.

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CONTAINERS THAT WERE MOVED OR DRAWN DOWN BY EMPLOYEES FROM INVALID DEPTS

CNTO	HPID#	PROC	AREA	EMPL	DEPT	DATE	USED POUNDS	VOC AMT POUNDS
	005031			3	0003	01/10/91	7.0000	0.0000
000016	005015	0014	0022	5	0004	01/10/91	62.0000	0.0000
000048	005023	0018	0002	6	0004	01/10/91	1.0120	0.0134
000079	005027	0012	0001	9	0005	01/10/91	62.0000	0.1798
	005018			14	0008	01/10/91	53.6750	21.0030
	005025			15	8000	01/10/91	0.2595	0.0000
	005020			15	0008	01/10/91	88.0000	0.5368

HAZARDOUS PRODUCTS THAT WERE USED IN AN INVALID PROCESS

CNT	HPID#	PROC	AREA	EMPL	DEPT	DATE	USED POUNDS	VOC AMT POUNDS
000016 000048 000079 000017	005031 005015 005023 005027 005018 005025	0014 0018 0012 0014 0001	0022 0002 0001 0004 0008	3 5 6 9 14 15	0003 0004 0004 0005 0008 0008	01/10/91 01/10/91 01/10/91 01/10/91 01/10/91 01/10/91 01/10/91	7.0000 62.0000 1.0120 62.0000 53.6750 0.2595 88.0000	0.0000 0.0000 0.0134 0.1798, 21.0030 0.0000 0.5368

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM REPORT DATE: 01/17/92 REPORT#: 71 PAGE#: 1

CHEMICAL INVENTORY ON HAND + SPECIALS LIST TOTALS

O (000	DESIGNATION	10 10		CEEK MC	HE.	ARE IC	GFY LON	CHI CET RE
*****) HOUSELS	NOCIA .		•	•	•	•	-	
*****	8.7729	KENNERS		٠	•	•	•	26	173
******	75670	KINIBOOE		٠	•	•	•	•	•
*****	66.97	KERIC KER, EKENL		٥	•	•		336	506
32000	\$479E	KENTENDERLIK KEM			•	•	•	2776	211
*****	2 (27403	C.I. ACID GRANE 46		۰	•	•	•	49	Q
100431	2547484	C.I. ACRO 960 66		•			•	2943	2154
10000	157400	ACHOLOGIC		٥	•	336	•	168	234
100027	107131	ACRECATED		٠				•	•
	14764	ACTORDOCOR 9			•		•		•
*****	124440	AUTOR ACID		٠	•	•	•	184	553
2	2303,4920	JOEDANICSI		•	•	•	•	•	•
				_		***			911

Master Reports

Reports 81-116 are all master reports. These reports list all the data within a particular application. The main purpose of this report is to provide the HMTS management with the ability to review data within the system in a hard copy format.

REPORT DATE: 01/17/92 REPORT#: 81 PAGE#: 1

HAZARDOUS PRODUCT VIA MARINE COATING RULE RAW DATA

HAZARDOUS PRODUCT ID#	COATING CATEGORY
000014	AF
000014	TC
000050	AF
000050	ANTC
000055	ANTC
000055	EHGA
000100	EEGA
000100	ERGB
000150	ERGB
000200	EHGB
005016	TC

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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VOC LIMIT CATEGORIES FOR MARINE COATINGS

COATING CATEGORY	G/LITER	COATING DESCRIPTION
λF	440	ANTIFOULANT
ANTC	680	ANTENNA COATING
EHGA	490	EXTREME HIGH-GLOSS - AIR DRIED
EHGB	420	EXTREME HIGH-GLOSS - BAKED
GAD	340	GENERAL - AIR DRIED
GBA	275	GENERAL - BAKED
HGA	420	HIGH GLOSS - AIR DRIED
HGB	360	HIGH GLOSS - BAXED
HRA	520	HEAT RESISTANT - AIR DRIED
HRB	445	HEAT RESISTANT - BAKED
HT	650	HIGH TEMPERATURE
IZ	650	INORGANIC ZINC
LAI	490	LOW ACTIVATION INTERIOR
ME	420	MILITARY EXTERIOR
NA	550	NAVIGATIONAL AIDS
PINP	780	PRE-TREATMENT WASH PRIMER
RMT	650	REPAIR AND MAINTENANCE THERMOPLASTIC
SI	420	SPECIALTY INTERIOR
SM	490	SPECIAL MARKING
SWSA	610	SEALANT FOR WIRE-SPRAYED ALUMINUM
TC	610	TACK COAT
UNSA	420	UNDERSEA MEAPONS SYSTEMS - AIR DRIED
UNSB	360	UNDERSEA WEAPONS SYSTEMS - BAKED

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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STORAGE TYPES

STORAGE TYPE CODE	DESCRIPTION
B C C D E F G G H I J K L H N O O O O O O O O O O O O O O O O O O	ABOVE GROUND TANK BELOM GROUND TANK BELOM GROUND TANK TANK INSIDE BUILDING STEEL DRUM PLASTIC OR METALLIC DRUH CAN CARBOY SILO FIBER DRUH BAG BOX CYLINDER GLASS BOTTLES OR JUGS PLASTIC BOTTLES OR JUGS TOTE BIN TANK MAGON RAIL CAR OTHER BELOM GROUND TANK—FIBERGLASS

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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HHIS PERSONAL PROTECTION INDEXES

RMIS PERSONAL PROTECTION INDEX	HHIS PERSONAL PROTECTION REQUIRED
?	UNIXNOMN
λ	SAFETY GLASSES
В	SAFETY GLASSES + GLOVES
C	SAFETY GLASSES + GLOVES + SYNTHETIC APRON
)	FACE SHIELD + GLOVES + SYNTHETIC APRON
2	SAFETY GLASSES + GLOVES + DUST RESPIRATOR
•	SAFETY GLASSES + SYNTHETIC APRON + DUST RESPIRATOR
3	SAFETY GLASSES + GLOVES + VAPOR RESPIRATOR
H	SPLASH GOGGLE + GLOVES + SYN APRON + VAPOR RESPIR
I.	SAFETY GLASSES + GLOVES + DUST & VAPOR RESPIRATOR
J	SPLASH GOGG + GLOVES + SYN APRON + DUST & VAPOR RE
K	AIR LINE ROOD/MASK + GLOVES + FACE SHIELD + BOOTS
K	ASK SUPERVISOR

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HMIS HAZARD INDEXES

HAZARD INDEX	DESCRIPTION
0 1 2 3 4	MINIMAL RAZARD SLIGHT RAZARD MODERATE RAZARD SERIOUS RAZARD SEVERE HAZARD UNINOWN

NFPA REACTIVITY CODES

REACTIVITY CODE	DESCRIPTION
0 1 2 3 4 ?	STABLE UNSTABLE IF HEATED VIOLENT CHEMICAL CHANGE SHOCK/HEAT MAY DETONATE HAY DETONATE UNKOWN

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

REPORT DATE: 01/14/92 REPORT#: 87 PAGE#: 1

NFPA SPECIAL NOTICE CODES

CODE	SHORT DESCRIPTION	LONG DESCRIPTION
1 2 3 4 5 6 7	OX ACID ALK COR NO W RAD NONE	OXIDIZER ACID ALKALI CORROSIVE USE NO MATER RADIATION HAZARD NONE

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

NFPA HEALTH HAZARD CODES

REALTH HAZARD CODE NORMAL MATERIAL SLIGHTLY HAZARDOUS HAZARDOUS EXTREME DANGER DEADLY UNKNOWN 0 1 2 3 4 ?

DESCRIPTION

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REPORT DATE: 01/14/92 REPORT#: 89 PAGE#: 1 REPORT DATE: 01/14/92 REPORT#: 90 PAGE#: 1 TEST COMPANY NAME, INC. HAZARDOUS HATERIAL TRACKING SYSTEM TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM NFPA FIRE HAZARD CODES PRESSURE CONDITION CODES FIRE HAZARD COOR DESCRIPTION CODE DESCRIPTION MILL NOT BURN
ABOVE 200 DEGREES F
BELOW 200 DEGREES F
BELOW 100 DEGREES F
BELOW 73 DEGREES F
UNKNOWN AMBIENT PRESSURE GREATER THAN AMBIENT PRESSURE LESS THAN AMBIENT PRESSURE REPORT DATE: 01/14/92 REPORT#: 91 PAGE#: 1 TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM REPORT DATE: 01/14/92 REPORT#: 92 PAGE#: 1 TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM TEMPERATURE CONDITION CODES TIER II REPORTING RANGES REPORTING RANGE DESCRIPTION UPPER VALUE CODE LOWER VALUE AMBIENT TEMPERATURE GREATER THAN AMBIENT TEMPERATURE LESS THAN AMBIENT TEMPERATURE CRYOGENIC 00 01 02 03 04 05 06 07 08 09 10

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TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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CONTAINER UNIT'S CODE

CODE	DESCRIPTION	CONVERSION FACTOR TO GALLONS	CONVERSION FACTOR TO POUNDS
	GALLONS	1.0000	
G		210000	2,2000
K	KILOGRAMS	2.6420	
L	LITERS	2.6420	0.0625
0	OUNCES (NT)		
P	POUNDS		1.0000
•	QUARTS	0.2500	
ŭ			0.0022
R	GRAMS	0.1250	*****
T	PINTS	0.1230	

CHEMICAL.	COMPONENTS	OF A	HAZARDOUS	PRODUCT

HP ID	CHEM. ID	LOW PCT OF CHEM. IN PRODUCT	HIGH PCT OF CHEM. IN PRODUCT
000014	000041	25.00	100.00
000014	000037	12.00	13.00
000014	000039	12.00	15.00
000014	000002	90.00	110.00
000014	000096	45.00	56.00
000050	000037	23.00	24.00
000050	000039	10.00	50.00
000050	000005	102.00	110.00
000055	000037	50.00	100.00
000055	000039	12.00	20.00
000055	000005	75.00	100.00
000075	000039	50.00	100.00
000300	000037	50.00	100.00
005015	010013	45.00	55.00
005016	009016	10.00	15.00
005016	009028	10.00	15.00
005016	003582	10.00	25.00 20.00
005018	000034	10.00	20.00
005018 005018	003211 000009	10.00 20.00	30.00
005018	009002	10.00	30.00
005019	000003	15.00	30.00
005019	000089	55.00	60.00
005020	009036	5.00	10.00
005020	009019	5.00	10.00
005021	000059	15.00	28.00
005021	009019	15.00	18.00
005022	009016	15.00	16.00
005023	000090	15.00	26.00
005024	000087	45.00	56.00
005025	000061	30.00	55.00
005025	000087	50.00	55.00
005026	003004	10.00	15.00
005026	000059	10.00	15.00
005027	003585	20.00	25.00 25.00
005028	000029	20.00 20.00	25.00
005028 005029	000106 000040	10.00	30.00
005029	000085	50.00	60.00
005030	000085	15.00	30.00
005030	000062	15.00	30.00
005031	000026	25.00	30.00
005032	000042	25.00	40.00
005033	003582	90.00	95.00
005034	000031	90.00	95.00
	-		

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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CHEMICAL COMPONENTS OF A CHEMICAL MIXTURE

CHEM. ID # OF HIXTURE LOW	CHEM. ID # OF COMPONENT	PCT IN HIXTU		TENDS TO L:LESS THAN OR G:GREATER THAN, THE
000003	000003		.0000	
000004	000004		.0000	
000005	000005		0.000	
000006	000006		.0000	
000007	000007		.0000	
000008	000008		.0000	
000009	000009		.0000	
000010	000010		.0000	
000011	000011		.0000	
000013	000013		.0000	
000014	000014		.0000	
000015	000015		0.0000	
000016	000016		0.0000	
000017	000017		.0000	
000018	000018		.0000	
000019	000019		.0000	
000020	000020		.0000	
000021	000021		.0000	
000022	000022		0.0000	
000023	000023		0.0000	
000024	000024		0.0000	
000026	000026			
000027	000027		0.0000	
000028	000028		3.0000	
000029	000029		5.0000	
000030	000030		2.0000	
000031	000031		0.0000	
000033	000033		0.0000	
000034	000034		0.0000	
000035	000035		0.0000	
000036	000036 000037		0.0000	
000037	000038		0.0000	
000038	000038		0.0000	
000039			0.0000	
000040	000040 000041		0.0000	
000041	000042		0.0000	
000042	000043		0.0000	
000043	000043		0.0000	
000044	000044		0.0000	
000045	000045		0.0000	
000046	000047		0.0000	
000047	000048		0.0000	
000048 000049	000049		0.0000	
000049	000050		0.0000	
	000051		0.0000	
000051	-0007			

HAZARDOUS PRODUCTS ALLOWED IN A PROCESS

PROCESS ID	HP ID	
0001 0001 0003 0003	000014 000100 000014 000100	

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TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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SECTION 302 CHEMICALS RAW DATA

CHEMICAL ID	TPQ LIQ/GAS/FINE PART	TPQ GENERATED SOLIDS
003581	100	200
003582	200	500
009002	200	500
009005	566	700
009008	123	455
009018	10	40

SECTION 304 CHEMICALS RAW DATA

CHEMICAL ID	REPORTABLE QTY	
000002	0	
000003	100	
000004	5000	
000005	1000	
000006	0	
000007	Ö	
000008	Ö	
000009	5000	
000010	5000	
000011	0	
000012	5000	
000013	10	
000014	5000	
000015	0	
000016	0	
000017	5000	
000018	5000	
000019	0	
000020	0	
000021	Õ	
000022	• 0	
000023	1 0	
000024	0	
000025	0	
000026	0	
000027	0	
000028	0	
000029	Ö	
000030	0	
000031	<u> </u>	
000033 000034	0	
000034	1	
000035	5000	
000037	5000	
000037	100	
000038	1 2	
000040	0	
000041	5000	
000042	0	
000043	<u> </u>	
000044	ĭ	
000045	*	
000046	0 1 0 1	
000047	ń	
000048	ŏ	
000049	100	
000050	1	
000051	ō	
000052	1000	

TEST COMPANY NAME, INC. HAZARDOUS HATERIAL TRACKING SYSTEM

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SECTION 313 TOXIC CHEMICALS RAW DATA

313 TOXIC CHEMICAL ID#

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

OSHA HAZARDOUS CHEMICAL RAW DATA

OSHA HAZARDOUS CHEMICAL ID#

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TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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CA AB2588 A-I CHEMICALS RAW DATA

CHEHICAL ID!	CARCINOGENIC
000005	Y
000008	Х Х Х Х
000034	Ÿ
000035	Y
000037	Y
000038	Y
000052	Y Y Y
000082	Y
000087	Y
000100	Y
000174	Y .
000188	Ÿ Y
000189 000227	Ÿ
000227	Ÿ
000235	Ÿ
000233	Ÿ
000241	Ÿ
000242	Y
000251	Ý Y
000257	Y
000266	х х х
000281	Y
000296	Y.
000325	Y.
000381	Y Y
000424 000429	Y Y
000449	Ÿ
000456	Y
000467	Ÿ Y
000469	Ÿ
000489	Y
000499	Y
000504	Y
000524	Ÿ
000525	Ÿ
000591	Ÿ
000600	Y
000612	I w
000678 000682	¥
000682	v v
000699	Ÿ
000727	Ϋ́
000737	Ÿ
000821	Y
000824	Y
000835	Y
000837	** ** ** ** ** ** ** ** ** ** ** ** **
000853	Y

CA AB2588 A-II CHEMICALS RAW DATA

CHEMICAL ID#	CARCINOGENIC
000023	Y
000041	Ý
000083	Y
000088	Y
000154	Y
000155	Y
000171	Y
000200	Y
000201	Y
000238	Y
000246	Y
000277	Y
000278	Ÿ.
000283	¥
000329	Y.
000377	Y
000447	Y
000460	Y
000503	Y
000508	Y.
000559	Y
000560 000628	Y v
000654	I U
000661	I v
000680	1
000689	i v
000691	÷
000692	÷
000693	÷
000694	÷
000695	Ÿ
000717	Ÿ
000735	Ÿ
000764	Ÿ
000777	Ÿ
000793	Ÿ
000797	Y
000803	Y
000816	Y
000827	Y
000847	¥
000854	Y
000885	Y
000894	Ÿ.
000904	Y.
000960	Y
000962	***************************************
000967	I

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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TEST COMPANY MAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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CONTRACT HASTER LIST

CONTRACT NUMBER	DESCRIPTION
0001 0002 0003 0009 0012 0013 0222	AGE OILER RESEARCH VESSEL LHA 710-712 HEAVY LIFT LAUNCH PROTOTYPE LAUNCH 13 CARRIER
1222 1286 7722 8888	BULK CARRIER CAR/PASSENGER FERRY CARRIER 003-008 ARCTIC VESSEL

HAZARDOUS PRODUCT VIA MARINE COATING RULE RAW DATA

HULL NUMBER	DESCRIPTION
0001	LHA 1
0001	HEAVY LIFT
0002	LHA 2
0003	LHA 3
0004	LHA 4
0010	Passenger
0022	OILER HULL 22
0025	OILER HULL 25

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SMBS (SHIP WORK BREAKDOWN STRUCTURE) RAW DATA

SWBS ID!	DESCRIPTION
000	GENERAL GUIDANCE AND ADMINISTRATION
100	HULL STRUCTURAL, GENERAL
200	PROPULSION PLANT, GENERAL
300	ELECTRIC PLANT, GENERAL
100	COMMAND AND SURVEILLANCE, GENERAL
500	AUXILIARY SYSTEMS, GENERAL
600	OUTFIT AND FURNISHINGS, GENERAL
631	PAINTING
700	ARMAMENT, GENERAL
800	INTEGRATION/ENGINEERING
900	SHIP ASSEMBLY AND SUPPORT SERVICES

EMPLOYEE RAW	DATE
--------------	------

EMPLOYEE ID	EMPLOYEE'S N	ME.
1	BARBARA	A. ADDISON
2	JAMES	B. BELANGER
3	SAMANTHA	C. CABINETREE
28	MATILDA	C. CAMP
4	JEROME	D. DANIELS
5	CRAIG	E. EASTVIEN
6	HICHAEL	F. FENNER
7	ROBERT	G. GENTHE
8 9	CARL	H. HOFFMANN
9	SHERRY	I. ISAACSEN
10	BELINDA	J. JACKSON
11	Stephen	K. KAISER
12	HOWARD	L. LOEFFELHOLZ
13	GERALD	H. HOON
14	SHANN	N. NOONAN
15	HERWIN	O. OLSON
16	MARY	P. PINK
30	JOHN	Q. QUADE
17	SARA	Q. QUINN
18	SAMUEL	R. RALPH
19	CLARENCE	S. SCHMIDT
27	GEORGE	S. SCHMIDT
20	DOROTHY	T. THOMAS
21	PATRICIA	U. URBAN
22	BEA	V. VALENTINE
29	SCOTT	W. WARE
23	ALBERT	W. WEBER
24	BERNADINE	X. XANDER
25	WILLARD	Y. YOUNG
26	Joseph	Z. ZIMMERMAN

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

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DEPARTMENT RAW DATA

TR ID	NAME AND ADDRESS	DAY PHONE EMERGENCY PHONE FAX#
00001	ADAMS BOTTLING COMPANY 555 THIRD STREET P.O. BOX 999 WAUSAU, MI 54401-9999	608-555-7101 608-555-7102
00002	BIRD MANUFACTURING 217 SECOND STREET P.O. BOX 999 PLATTEVILLE, WI 53818-9999	608-555-6101 608-555-6102
00003	CROWN EQUIPMENT, INC. 101 WATER STREET P.O. BOX 999 KANSAS CITY, KS 61101-9999	913-555-6101 913-555-6102
00004	DARTS LTD., INC. 219 EAST LASALLE STREET P.O. BOX 999 DUBUQUE, IA 52201-9999	319-555-6101 319-555-6102
00005	EUGENE'S TRANSPORTS, INC. 200 MEST INDUSTRIAL LANE P.O. BOX 999 FAIRPLAY, ND 66201-9999	819-555-3221 819-555-3333
9000	FAIRGATE BROS. MFG. 123 SOUTH PEARL STREET P.O. BOX 999 POTOSI, WI 54399-9999	608-555-3221 608-555-3333
00007	GREAT NORTHERN CORPORATION 213 EAST RAILROAD DRIVE P.O. BOX 999 CEDAR RAPIDS, IA 89399-9999	213-555-3221 213-555-3333
00008	HIGHLAND LUMBER CO., INC. 206 NORTH CLARK STREET P.O. BOX 999 HILMAUKEE, WI 53201-9999	414-555-3221 414-555-3333
00009	THE ICELAND COMPANY ROUTE 1, BOX 88 P.O. BOX 123 LOS ANGELES, CA 87600-9999	805-555-3221 805-555-3333
00010	JACKSON MANUFACTURING 8663 196TH STREET P.O. BOX 233	719-555-3221 719-555-3333

PRODUCT	MANUFACTURER	RAX	DATA

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

DEPT NUMBER	INSIDE PIPING OUTSIDE PIPING	HER ID	NAME AND ADDRESS	DAY PHONE EMERGENCY PHONE FAX#
0002 0003 0004 0005 0006 0007 0008	OUTSIDE PIPING OUTSIDE MACH INSIDE MACH PAINTING INSULATING CAPPENTRY ELECTRICAL	00001	ADAMS BOTTLING COMPANY 555 THIRD STREET P.O. BOX 999 HAUSAU, HI 54401-9999	608-555-7101 608-555-7102
0009 0010 0011 0012 0013	MELDING HULL TESTING BLASTING OUALITY ASSURE.	00002	BIRD MANUFACTURING 217 SECOND STREET P.O. BOX 999 PLATTEVILLE, WI 53818-9999	608-555-6101 608-555-6102
0014 0015 0016 0017 0018	INDUSTRIAL ENGR ENGINEERING MANAGEMENT INFO PLANNING LOFTING	00003	CROWN EQUIPMENT, INC. 101 WATER STREET P.O. BOX 999 KANSAS CITY, KS 61101-9999	913-555-6101 913-555-6102
0019 0020 0022 0023 0024	FABRICATION ACCOUNTING DIPPING QUALITY CIRCLES MAREHOUSE	00004	DARTS LTD., INC. 219 EAST LASALLE STREET P.O. BOX 999 DUBUQUE, IA 52201-9999	319-555-6101 319-555-6102
0025 0026 0027 0028 0029	FIBERGLASS CLEANING PUNCHASING HATERIAL CTRL RIGGING	00005	EUGENE'S TRANSPORTS, INC. 200 MEST INDUSTRIAL LANE P.O. BOX 999 FAIRPLAY, ND 66201-9999	819-555-3221 819-555-3333
0030	DISPOSAL	00006	FAIRGATE BROS. MFG. 123 SOUTH PEARL STREET P.O. BOX 999 POTOSI, WI 54399-9999	608-555-3221 608-555-3333
		00007	GREAT NORTHERN CORPORATION 213 EAST RAILROAD DRIVE P.O. BOX 999 CEDAR RAPIDS, IA 89399-9999	213-555-3221 213-555-3333
		00008	HIGHLAND LUMBER CO., INC. 206 NORTH CLARK STREET P.O. BOX 999 HILMAUKEE, WI 53201-9999	414-555-3221 414-555-3333
		00009	THE ICELAND COMPANY ROUTE 1, BOX 88 P.O. BOX 123 LOS ANGELES, CA 87600-9999	805-555-3221 805-555-3333
		00010	JACKSON MANUFACTURING 8663 196TH STREET P.O. BOX 233	719-555-3221 719-555-3333
		<u> </u>	F	IMTS Final Report 127

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000011 005020 0023 0021

000016 005015 0014 0022

000017 005018 0014 0022

000017 005028 0014 0004

000021 005025 0001 0008

000048 005023 0012 0010

000079 005027 0012 0010

000091 005024 0022 0013

000092 005034 0022 0013

000093 005030 0021 0019

000094 005020 0021 0019

000095 005027 0011 0012

000096 005027 0011 0012

000097 005027 0011 0002

000097 005027 0011 0002

000098 005017 0011 0002

000099 005017 0011 0002

000099 005017 0011 0003

000098 005017 0011 0003

000098 005017 0011 0003 0.5368 0.0000 21.0030 0.0000 0.0134 0.0000 0.1798 88.0000 62.0000 53.6750 0.2595 1.0120 7.0000 62.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 15 01/10/91 0.0000
5 01/10/91 0.0000
14 01/10/91 0.0000
15 01/10/91 0.0000
9 01/10/91 0.0000
01/10/91 0.0000
01/10/91 92.2000
01/10/91 3.2625
01/10/91 0.2277
01/10/91 9912.5198
01/10/91 9912.5198
01/10/91 27.7000
01/10/91 83.6550
01/10/91 91.9600
01/10/91 91.9600
01/10/91 91.9600 15 01/10/91 0.0000 0.0000 0.0000 0.0000 0.0000 CR C:G/LIT CR L:LE/GAL HAID MAR, 2 AMOR MAR COURSE EXCHANGE AND
COMMENTS HE STUDIESCHONTERVENION
COMMENTS HE STUDIESCHONTERVENION
CONTROL BETWEEN
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CONTROL
CONTROL COOKER SERVING ACTO TIME E ELLAS OF L MINE L 2.00 L 0.0000 01/10/91 1414.1000 23.34 G 29.00 L 3.40 L 1.10 L 0.50 L 2.00 L 4.00 L 2.20 L REPORT DATE: 01/14/92 REPORT#: 112 PAGE#: 1 REPORT DATE: 01/14/92 REPORT#: 111 PAGE#: 1 TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM PROCESSES RAW DATA SYNONYM RAW DATA PROCESS ID PROCESS DESCRIPTION CHEMICAL ID SYNONYM ID # CHEMICAL SYNONYM PAINTING 0001 MELDING STRIPPING SANDING DIPPING LAMINATING CAULKING 0002 0003 0004 0005 0006 0007 0008 0010 0011 0012 0013 0014 0015 0016 000002 000002 ACACIA GUM 000002 GRINDING
GRINDING
PIPE FLUSHING
CLEANING
HACHINING
TESTING
BRAZING 000003 ACENAPHTHENE 000003 000004 ACENAPHTHYLENE 000004 INSULATING INSTALLING LIGHTING 000005 000005 ACETALDEHYDE FITTING MAINTENANCE 000005 000006 ACETIC ALDERYDE 0019 CUTTING BURNING 000006 0021 SETUP PLUMBING 000007 ACETALDEHYDE AMMONIA 0023 STORAGE 000007 000008 000007 000009 ACETALDEHYDE, OXIME 000007 000010 ACETALDOXIME 000008 000011 ACETAMIDE 000008 000012 ACETIC ACID AMIDE 000013 ACETIC ACID AMINE 000008 000014 ACETIMIDE ACID 000008

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000015 ACETIC ACID 000009

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AREAS RAW DATA

AREA ID #	SHORT DESCRIPTION	DESCRIPTION
0001	PNTSP	PAINT DEPARTMENT SMALL PARTS ROOM
0002	BLAST	BLAST BOOTH
0003	21TL	BUILDING 21 TOOL ROOM
0004	LAH	LAMINATING EAST SHOP FLOOR
0005	PATOO	MAIN TOOL ROOM
0006	HACH	MACHING TOOL ROOM
0007	OUAL	QUALITY ASSURANCE LAB
0008	DBTH	DIPPING BOOTH
0009	WHSE8	WAREHOUSE 8 TOOL ROOM
0010	WH816	WAREHOUSE 8 TOOL ROOM BIN 16
0011	XH817	WAREHOUSE 8 TOOL ROOM BIN 17
0012	HH818	WAREHOUSE 8 TOOL ROOM BIN 18
0013	WH822	WAREHOUSE 8 TOOL ROOM BIN 22
0014	PIPEM	PIPE SHOP MAIN TOOL ROOM
0015	PIPEO	PIPE SHOP WATER FRONT TOOL BOOTH
0016	INSUL	INSULATING SHOP CRIB
0017	TESTC	TESTING CRIB
0018	RIGBA	RIGGING BACK OFFICE
0019	GAS1	GASOLINE STATION NUMBER 1
0020	SUP12	ENGINEERING SUPPLY SHELF 12
0021	SUP17	ENGINEERING SUPPLY SHELF 17
0022	PNTT	PAINT TEST AREA
0023	CLNH	CLEANING MAIN STORAGE
0024		HULL 0006 AFT DECK BINS
0025		HULL 0007 AFT DECK BINS
0026	HLLS5	HULL 55 BELOW DECK GANG BOX
0027	DOCK1	GRAVING DRYDOCK
0028	DOCK2	FLOATING DRYDOCK
0029	PURCH	PURCHASING 2ND FLOOR STORAGE ROOM
0030	LOFT	LOFT AREA CLOSET
0031	HLBIN	HULL DEPARTMENT STEEL RACKS
0032	PNIME	PAINT DEPARTMENT WATERFRONT FENCED AREA

HAZARDOUS CHEMICALS RAW DATA

CEN IDA: SECRET CRES: SECRET.

CHOCOL MARKE: ACHCIA

HICS DELINE, FLAMENBELLTY, MENCILYTTY, PERSON, PROTECTION:

FLAMENBELLY, FROM MENCINCY, SPECIAL PROTECTION:

TIEN LIGHTH MARKA, SIZORS SHEETEN, MENCILYTTY, ACTS MOLLEY,

DELINES SHEETE MENCINC MENCINCH

COMMENT SHEETE MENCINC SECRET.

DEMITTY MOUTH: 6.00 VOTS: MEN-CHROMATTER CHRICAL;

CHE DISTRICT NAME TO AN ANALYSIS CHEM FORM:
CHECAL MANNE ACCOMMENTER.
CHECAL CHEM AND ACCOMMENTER.
CHECAL CHEM AND ACCOMMENTER.
CHECAL CHEM AND ACCOMMENTER.
CHECAL CHEM AND ACCOMMENTER.
CHEM AND ACCOMMENT

CHR ID: 00000 CHR: 20000 CHR FORT
CHRCUL MORE ACROMOMETER
HIS DRIEN, FLOOR STREET, SHICTLYITY, FRINGEL PROTECTION I
HIS DRIEN, FLOOR STREET, SHICLA MORECE:
THE ILITE WHEN, SECOND FRINGE, SHICTLYY, AUTE MALES,
ELLYTS MARKE SHILL BETWEEN
LICKENS SHILL SHILL SHILL SALES
HOWER SHILL SHILL SHILL SALES
HOW SHILL SHILL SHILL SHILL SHILL
HOW SHILL SHILL SHILL
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HOW SHILL SHILL SHILL
HOW SHILL SHILL SHILL
HOW SHILL

CODE DE: 980005 CORS: 78479 COME FERRI: COCKE
CODGOL MRGE: ACENTAMENTALTY, MRGCHIVITY, PRESSAN, PROVINCIONS: 1
HIS GROUNE, FLAMOMENTALTY, MRGCHIVITY, PRESSAN, PROVINCIONS: 1
THE MARCH, STORM PROMICES, MRCHIVITY, ACUTE MRLEN,
DELLETO MRGEN MRCLE, MRCHIVET, MCCHIVITY, ACUTE MRLEN,
COMMON SHEET, MRGE P MCD: SCENE : LOUID: CAR:
DEMETY FORCE: 6.67 MCCS: MCG-CHRONATER CHRICOL2

CON IDE: 00000 CAME: TAINE CAME FORCE
CHICAL SHORT ACTIVIDISHES MINISTER, PERSONAL PROTECTION:
HICH DENIER, FLAVORABLITY, SENCILLYST, PERSONAL PROTECTION:
TIES LIGHTH HARRON, SIGNES MERSONAL, RECEDITITY, ACUTE MELLER,
DELETTO MALINE SHEELIN, LOCKLOIS
COMMENT SHEELIN FREEL P. HICH.
DEMETTY (CACI): 0.00 VOC'S: MON-CHIMONATER COMMITCAL

TEST COMPANY NAME, INC. HAZARDOUS MATERIAL TRACKING SYSTEM

-FTMT LDG-

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CONTAINER RAW DATA

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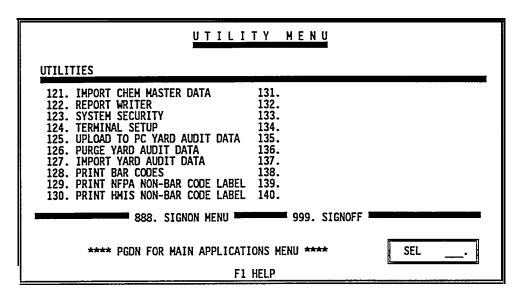
TEST COMPANY NAME, INC. HAZARDOUS HATERIAL TRACKING SYSTEM REPORT DATE: 01/14/92 REPORT#: 116 PAGE#: 1

PLANT OR SITE RAW DATA

PLANT NUMBER	PLANT NAME
Main	MAIN YARD
Whs8	MAREHOUSE 8
Wsst	WEST SIDE STORAGE

Utility Menu

The Utility Menu contains calls to other menu systems and special data imports.



Utility option 121 will import the CHEM Master data. The data will be imported into temporary applications invisible to the user and then split out into the HMTS data.

Utility option 122 will call the TEAM-UP Report Writer menu. This option will only work if the user has a full version of TEAM-UP or a runtime version. Within the Report Writer menu the user will be allowed to create and change reports. The Report Writer is a powerfid tool and can be very simple or very complex. A complete Report Writer manual for TEAM-UP has been included in the TEAM-UP reference appendix. It is highly recommended that the user review the appendix before using option 122.

Utility option 123 will call the TEAM-UP Security System. This option will allow the user to create his/her own security. The security system includes group and individual security. In addition, control options within HMTS can be changed by option 123. The Security system can be very complex. It is also recommended that the System Security reference section found in Appendix F be thoroughly reviewed prior to making changes in this area. The System Security option will not function in the demonstration version of HMTS.

Utility option 124 contains a full configuration menu for setting up printers and terminals. The user can enter very specific printer control codes if desired. This option should be used to tell TEAM-UP whether you have a color or monochrome screen.

Utility option 125 is the upload process for data that was collected in a yard audit via the Tricoder device. This option should be run immediately prior to running the comparison report, 66. This option will call the text editor within TEAM-UP. The first task that must be done within the text editor is to name the audit raw file. The name of this file must always be "DRIVE:TRICRDR.PRN". If the data being uploaded from the Tricoder is not

named accordingly, the data will not be imported to the Yard Audit application. A complete reference manual describing its use has been included in Appendix F.

Utility option 126 will clear the Yard Audit application data.

Utility option 127 imports the Yard Audit data into the Yard Audit application. Any records that do not import due to format errors will be collected in the error file TRICRDR.ERR. There error file may be viewed for comments describing the import error.

Utility option 128 calls a the bar code command module by Worthington Data Solutions Software. This program allows the user to print on an Epson-compatible printer bar codes that can be used to identify hazardous product containers. There are several options available for the user to choose from when generating the bar code label. A 2" x 3" label was used during the testing of this function. To print the bar code properly on this size of label, use single strike, a height of 5/10, Epson 24 pin compatible and a density of 2. Depending on the size label that you choose, you may have to alter the parameters listed above. Please see Figure 3.

Utility option 129 calls the non-bar code NFPA label. This option will print a label with manufacturers information, product information and safety concerns. The label has been designed for a label that is 2" x 3". Since labels come in all different sizes, HMTS allows the user to change the label size by accessing the Report Writer. Once in Report Writer the user may change the label to any size he wishes. Additional fields may also be added if the user so desires. Please see Figure 3.

Utility option 130 is the same as 129 except that it prints the HMIS ratings instead of the NFPA ratings.

HPID#: 000100

TRADE NAME: MAN SPECIAL SOLVENT
MFR'S ID#: 00014 PROSPEC PAINT INC.
EMERGENCY PHONE#: 234-245-5333

MEDA

HEALTH: NORMAL MATERIAL FIRE HAZARD: WILL NOT BURN REACTIVITY: STABLE SPECIAL NOTICE: OXIDIZER

HPID#: 000150

TRADE NAME: SILVER REMOVER . MFR'S ID#: 00014 PROSPEC PAINT INC. EMERGENCY PHONE#: 234-245-5333

NFPA

HEALTH: NORMAL MATERIAL FIRE HAZARD: WILL NOT BURN REACTIVITY: STABLE SPECIAL NOTICE: OXIDIZER

HPID#: 000200

TRADE NAME: PRIMER CLEAN METAL MFR'S ID#: 00014 PROSPEC PAINT INC. EMERGENCY PHONE#: 234-245-5333

NFPA

HEALTH: NORMAL MATERIAL FIRE HAZARD: WILL NOT BURN REACTIVITY: STABLE SPECIAL NOTICE: OXIDIZER

HPID#: 000300

TRADE NAME: 4050 F121
MFR'S ID#: 00014 PROSPEC PAINT INC.
EMERGENCY PHONE#: 234-245-5333

NFPA

HEALTH: NORMAL MATERIAL FIRE HAZARD: WILL NOT BURN REACTIVITY: STABLE

SPECIAL NOTICE: OXIDIZER

HPID#: 005012

TRADE NAME: BARIUM COMPOUNDS MFR'S ID#: 00014 PROSPEC PAINT INC. EMERGENCY PHONE#: 234-245-5333

HEALTH: NORMAL MATERIAL FIRE HAZARD: WILL NOT BURN REACTIVITY: STABLE

SPECIAL NOTICE: OXIDIZER

Figure 3:

Sample Non-Bar Code Labels and Sample HMTS Bar Code Container Labels



000100



000101



000102



000103



000104

Appendix E: TEAM-UP Specifics

Database Files

The TEAM-UP database definition and ad hoc report listing follow.

Application Listings

The application listing can be a very valuable tool for those that wish to implement HMTS on systems other than a PC compatible environment. The application listing provides information about field size, type, location, etc.

APPLICATION Haster: 1 Find: 9 Enter: 9 Update: 9 SECURITY Delete: 9 Print: 9 Batch: 9 Audit: 0 Record Security is DISABLED APPLICATION OPTIONS Alternate ":" character: "." Display message : N Display Page number : N Display time : N Display command : N Allow tab to home : N Data application : N Lines to print after page: 0 Item# to start cursor on: 1 Full field tab option : 2 Number of oneliners : "Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Allow use of ESC key : Y Valid database commands : X	30 - 12. CONTAINER ST 0 01 NON 0 N 0 0 0 0 0 0 0 N 0 31 - ATUS CHANGE MASS 0 01 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 32 - ENTRY 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 0 33 - SCONTAINER FOR 0 01 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 0 34 - HAZARDOUS PRODUC 0 01 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 0 35 - T 13. TARD AUDIT 0 01 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 0 35 - T 13. TARD AUDIT 0 01 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 0 35 - T 13. TARD AUDIT 0 01 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 0 37 - ACTURER 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 0 37 - ACTURER 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 0 38 - 14. 0 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 0 0 0 0
L	54 - 10. CHEMICAL CON 0 0 1 N 0 N 0 0 0 0 0 0 0 0 0 N 0
90 - 31. TEMPERATURE 91 - CONDITION 92 - 22. MARINE CTGS 0	150

2110 - 71. 2111 - 22. CONTAINER HI	270 - VOC LNT CATEGORI 271 - ES 272 - ES 273 - ETING BANGES 274 - 83, STORAGE TYPE 275 - 93, CONTAINER UN 276 - 17 277 - 84, HHIS PERSONA 0
330 - MASTER REPORTS	390 - UTILITIES

	HAZHENU 1		
CURRENTLY DEFINED REPORTS -	HAZARDOUS MATERIAL TRACKING		
NONE DEFINED	MAIN APPLICATION MENU		
	HAIN APPLICATIONS 1. HAZARDOUS PRODUCT 11. HAZ PROD ALLONED IN PROCESS		
	1. HAZARDOUS PRODUCT 11. HAZ PROD ALLONED IN PROCESS 2. HAZARDOUS CHEMICALS (CM) 12. CONT STATUS CHG MASS ENTRY 3. CONTAINER FOR HAZARDOUS PRODUCT 13. YARD AUDIT		
	4. PRODUCT MANUFACTURER 14. 5. CHEMICAL SYNONYM (CM) 15.		
	6. PROCESS WHERE PRODUCT IS USED 16. 7. AREA IN WHICH PRODUCT IS USED 17. 8. HIST OF PROO CIT'S USED OR ADDED 19.		
	9. CHEM MIXTURES & COMP CHEMS (CH) 19. 10. CHEMICAL COMPONENTS OF AN HP 20. RESEARCH PROJ DISCLAIMER!		
	V010192 PGDN FOR MASTER APPLICATION MENU **** - SEL 1:		
	F1 HELP		
HAZMENU 2	HAZMENU 3		
HASTER APPLICATION HENU	HASTER APPLICATION HENU (CONT.)		
MASTER APPLICATIONS	MASTER APPLICATIONS		
21. HAZARDOUS PRODUCT MARINE CTG 31. TEMPERATURE CONDITION 22. HARINE CTGS VOC LIMIT CATEGORIES 32. TIER II REPORTING RANGES 23. STORAGE TYPE 33. CONTAINER UNIT	41. CA AB2588 A-I CREMICALS 51. 42. CA AB2588 A-II CHEMICALS 52. 43. CONTRACT NUMBERS 53.		
24. HMIS PERSONAL PROTECTION INDEX 34. COMPANY DATA 25. HHIS HAZARD INDEX 35. DEPARTMENTS	44. HULL NUMBERS 54. 45. SMBS NUMBERS 55.		
26. NFPA REACTIVITY 36. EMPLOYESS 27. NFPA SECIAL NOTICE 37. SECTION 302 CHEMICALS (CH) 28. NFPA REALTH BAZARDS 38. SECTION 304 CHEMICALS (CM)	46. UNIQUE COUNTS 56. 47. PLANTS OR SITES 57. 48. 59.		
29. NFPA FIRE HAZARDS 39. SECTION 313 TOXIC CHEMICALS (CM) 30. PRESSURE CONDITION 40. OSHA HAZARDOUS CHEMICALS (CM)	48. 58. 49. 59. 50. 60.		
**** PGDN FOR MASTER APPLICATION MENU (CONT.) **** - SEL 2:	**** PGDN FOR REPORT MENU **** - SEL 3:		
F1 HELP	EJ HELP		
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HAZHENU 4 HAZMENU 5 REPORT MENU MASTER REPORT MENU REPORTS MASTER REPORTS 61. CONTAINERS BY DEPT AND AREA
62. CONTAINER HISTORY
63. HAZARDOUS PRODUCT ANTS ON HAND
64. ROUTINE VOC HISTSIONS
65. TIER II SARA REPORT
66. YARD AUDIT COMPARISON
67. NON-CHEMPASTER CHEMICALS
68. EXPIRED CNIRS WAT SHELF LIFE
69. INVALID CHANGES/HOVES
70. 81. HAZARDOUS PRODUCTIMARINE CTG
82. HARINE CTGSIVOC INT CATEGORIES
83. STORAGE TYPE
84. HHIS PERSONAL PROTECTION INDEX
85. HHIS HAZARD INDEX
86. NFPA REACTIVITY
96. HAZ PRODUCTS ALLOWED IN PROCESS
87. NFPA SPECIAL NOTICE
88. NFPA HEALTH HAZARDS
99. NFPA FIRE HAZARDS
90. FRESSURE CONDITION
90. CHARLOUS CHEMICALS
91. SECTION 304 CHEMICALS
92. TIER II REPORTING RANGES
93. CONTAINER UNIT
94. CHEM COMPONITS OF HP
95. CHEMICAL HIXTURES & COMP CHEMS
97. SECTION 302 CHEMICALS
99. SECTION 304 CHEMICALS
90. FRESSURE CONDITION
90. OSHA HAZARDOUS CHEMICALS -- 888. SIGNON MENU ----- 999. SIGNOFF -- 888. SIGNON MENU ----- 999. SIGNOFF -**** PGDN FOR MASTER REPORT MENU **** SEL 4: _ **** PGON FOR MASTER REPORT MENU (CONT.) **** - SEL 5: ___, -F1 HELP F1 HELP HAZMENU 6 HAZMENU 7 MASTER REPORT MENU (CONT.) UTILITY HENU HASTER REPORTS UTILITIES | 101. CA AB2588 A-I CHEMICALS | 111. CHEMICAL SYNONYM |
102. CA AB2588 A-II CHEMICALS	112. PRODUCTION PROCESSES
103. CONTRACT NUMBERS	113. AREA IN WHICH PRODUCT IS USED
104. HULL NUMBERS	114. HAZARDOUS CHEMICALS
105. SWBS NUMBERS	115. CONT FOR HAZARDOUS PRODUCT
106. EMPLOYEES	116. PLANT OR SITE ID
107. DEPARTMENTS	117.
108. PRODUCT MANUFACTURER	118.
109. HIST OF PROD OTTS USED OR ADDEDIIS.	
110. HAZARDOUS PRODUCT	120.
122. REPORT WRITER	132.
123. SYSTEM SECURITY	133.
124. TERMINAL SETUP	134.
125. UPLOAD TO PC YARD AUDIT DATA	135.
126. PURGE YARD AUDIT DATA	137.
127. IMPORT YARD AUDIT DATA	137.
128. PRINT BAR CODES	138.
129. PRINT NFPA NON-BAR CODE LABEL	139.
130. PRINT RHIS NON-BAR CODE LABEL	140.

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9 - INACE		
PRINCE P	SUMMARY FOR: HP Application version #: 45 01/11/92	30 - FIRE HAZARD 1 651 N 0 N 0 N 0 0 0 8 0 0 0 N 0 31 - IY/N 0 0 1 N 0 N 0 N 0 0 0 0 1 0 N 0 32 - ACUTE HEALTH HAZ 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 N 0
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7 - WINDER 8 - GAUTO FILL) 9 - ON 1	1 - HAZARDOUS PRODUC 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 N 0 0 2 - T 0 0 1 N 0 N 0 N 0 N 0 0 0 0 0 0 N 0 0 3 0 0 1 N 0 N 0 N 0 N 0 0 0 0 0 0 0 N 0 4 0 0 1 N 0 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 5 - HAZARDOUS PRODUC 0 0 1 N 0 N 0 N 0 0 0 0 0 0 1 0 N 0	55 - G-G/L, T-LB/GAL 0
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REPORT FILE: HP.TR2 REPORT NAME: HMIS LABEL DESCRIPTION: HAZARDOUS PRODUCT LABEL WITH HHIS RATINGS	REPORT FILE: HP.TRO REPORT NAME: MASTER DESCRIPTION: RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA REPORT FILE: HP.TRI REPORT NAME: NFPA LABEL DESCRIPTION: HAZARDOUS PRODUCT LABEL WITH NFPA RATINGS	HAZARDOUS PRODUCT HAZARDOUS PRODUCT HAZARDOUS PRODUCT ID NUMBER:
i	REPORT FILE: HP.TR2 REPORT NAME: EMIS LABEL DESCRIPTION: HAZARDOUS PRODUCT LABEL WITH HMIS RATINGS	

	22 2 2000
SUMMARY FOR: IMAGMENU Application version #: 18 01/11/92	30 - 3. PRINT MSDS TO 0 01 N 0 N 0 0 0 0 0 0 0 N 0 31 - LASER PRINTER 0 01 N 0 N 0 0 0 0 0 0 0 N 0 32 0 01 N 0 N 0 0 0 0 0 0 0 N 0 32 0 01 N 0 N 0 0 0 0 0 0 0 0 N 0 0 0 0 0
APPLICATION Master: 1 Find: 9 Enter: 9 Update: 9	34 0 01 NON 0 N 0 0 0 0 0 0 N 0 35 0 01 NON 0 N 0 0 0 0 0 0 N 0
SECURITY Delete: 9 Print: 9 Batch: 9 Audit: 0 Record Security is DISABLED	37 - EPSON PRINTER
	40 0 01 NON 0 N 0 0 0 0 0 0 0 N 0
APPLICATION OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display message : N Display Page number : N	43
Display time : N Display command : N Allow tab to home : N Data application : N Lines to print after page: O Item# to start cursor on: 54	46 0 01 NON 0 N 0 0 0 0 0 0 N 0 47 - 6. EXIT 0 01 NON 0 N 0 0 0 0 0 0 N 0
Full field tab option : 2 Number of oneliners : - Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Allow use of ESC key : N	49 0 01 NON 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 0 0 N 0
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E OAIETULEATT MYNAAK N N CGIYPPICNEUT PTTT PE	58 0 01 NON 0 N 0 0 0 0 0 0 0 N 0 59 - LHA 0 02 N 0N 9 N 0 0 0 0 0 0 N 0
1	61 - PCK
4 0 01 NON 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 0	64 - PCX
7 - MSDS IMAGE SCANN 0 01 N 0 N 0 N 0 0 0 0 0 0 N 0 8 - ING MENU 0 01 N 0 N 0 0 0 0 0 0 0 N 0 9 - 0 0 0 0 N 0 N 0 0 0 0 0 0 0 N 0	67 - DISPLAY 55 206 2 NON 9 NO 0 0 8 0 0 0 N 0 68 - PCX FILE 12 261 2 NON 9 NO 0 0 8 0 0 0 N 0 69 - LHAT 9 0 2 NON 9 N 0 0 0 0 0 0 0 N 0
10 0 01 NON 0 N 0 0 0 0 0 0 N 0 0 11 0 01 NON 0 N 0 0 0 0 0 0 N 0 12 0 01 NON 0 N 0 N 0 0 0 0 0 N 0	70 - PACK 45 273 2 N O N 9 N O O 0 8 O O O N O TOTALS: Stored: 313 Keys: 1 Chars on oneliner: 1
13 0 01 NON 0 N 0 0 0 0 0 0 N 0 14 0 01 NON 0 N 0 0 0 0 0 0 N 0 15 - 0 0 0 1 NON 0 N 0 N 0 0 0 0 0 N 0	Non-stored: 0 Keysize:26 Record size: 318
16 0 01 NON 0 N 0 0 0 0 0 0 N 0 17 0 01 NON 0 N 0 0 0 0 0 0 N 0 18 -1. SCAN A HSDS I 0 01 NON 0 N 0 N 0 0 0 0 0 0 N 0	
19 - NTO MEMORY 0 01 N 0 N 0 0 0 0 0 0 0 N 0 20 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 N 0 21 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 N 0	CURRENTLY DEFINED REPORTS - NONE DEFINED
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29 0 01 NON 0 N 0 0 0 0 0 0 N 0	
IHAGHENU 1	INAGMENU 2
- MSDS IMAGE SCANNING MENU -	LHA EXTRACT: PCK LASER: FILE:
	PCX PRINT: PCX DISPLAY: PCX FILE:
- 1. SCAN A MSDS INTO MEMORY	LHA PACK:
- 3. Print msds to laser printer 4. Print msds to epson printer -	
- 5. OPTIONS MENU	
- 6. EXIT	
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SUMMARY FOR:SCANMENU Application version #: 14 01/11/92 APPLICATION Haster: 1 Find: 9 Enter: 9 Update: 9 SECURITY Delete: 9 Print: 9 Batch: 9 Audit: 0 Record Security is DISABLED	29 - HORIZONTAL PROCE 0 0 1 NON 0 NO 0 0 0 0 0 0 0 NO 0 30 - SSING 1 91 NON 0 NO 0 NO 0 0 0 0 0 NO NO 0 NO 31 - SUMMING - [S] 0 0 1 NON 0 NO 0 NO 0 0 0 0 0 NO NO 32 - AVERAGING - [A] 0 0 1 NON 0 NO 0 NO 0 0 0 0 0 NO NO 33 - VIDEO MODE 1 101 NON 0 NO NO 0 0 0 0 0 0 NO 10 34 - VGA - [1] 0 0 1 NON 0 NO NO 0 0 0 0 0 0 NO 10 34 - VGA - [1] 0 0 1 NO NO NO NO 0 0 0 0 0 0 NO NO 35 - EGA - [2] 0 0 1 NO NO NO NO 0 0 0 0 0 0 NO NO 0 36 - CGA - [3] 0 0 1 NO NO NO NO 0 0 0 0 0 0 NO NO 0 0 0 0 NO 0 0 NO 0 0 NO NO 0 NO
APPLICATION Message: ENTER-SAVE SETUP, ESC-CANCEL SETUP CHANGE OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display message : Y Display Page number : N Display time : N Display command : N	41 - FULL MIDTH - [2] 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 N 0 42 - FULL PAN - [3] 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 N 0 43 - F1-HELP 0 0 1 N 0 N 0 N 0 0 0 0 0 1 0 N 0 44 - ESC-EXIT 0 0 1 N 0 N 0 N 0 0 0 0 0 1 0 N 0
Allow tab to home : Y Data application : N Lines to print after page: 0	TOTALS: Stored: 7 Keys: 1 Chars on onelinor: 54 Non-stored: 0 Keysize:26 Record size: 12
Other valid commands : S	CURRENTLY DEFINED REPORTS - NOME DEFINED
L LP!KKD!S M A A F T P N D S O E OA!ETU!E A T T M Y N A A K N N CG!YPP!C N E U T P T T T P E 1 - SCANNING OPTIONS 0 01 N 0 N 0 0 0 0 0 0 0 0 0 0 0 0	·
2	
10 - 9 PIN - [2] 0 01 N 0 N 0 N 0 0 0 0 0 0 0 N 0 11 - DOUBLE STRIKE 24 0 01 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 12 - PIN - [5] 0 01 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 13 - QUAD 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 0 14 - STRIKE 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 15 - 9 PIN - [3] 0 01 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 16 - QUAD 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0	
17 - STRIKE 24 PIN - 0 01 N 0 N 0 N 0 0 0 0 0 0 0 N 0 18 - (6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	

SCANMENU 1

SCANNING OPTIONS

PRINTER MODE:

SINGLE STRIKE 9 PIN = [1] SINGLE STRIKE 24 PIN = [4]

DOUBLE STRIKE 9 PIN = [2] DOUBLE STRIKE 24 PIN = [5]

QUAD STRIKE 9 PIN = [3] QUAD STRIKE 24 PIN = [6] PROCESSING: _. VERTICAL SUM = [V] INVERSE SUM = [I] PORT: _. PARALLEL [0/1] FUNCTION: _. SCREEN - [D] PRINTER - [P] HORIZONTAL PROCESSING: _. SUMMING - (S) AVERAGING - (A) VIDEO_MODE: _. VGA = [1] EGA = [2] CGA = [3] HERC = [4] AUTO = [5] DISPLAY: _. FULL DOC = [1] FULL WIDTH = [2] FULL PAN = [3]

F1=HELP ESC=EXIT

APPLICATION OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display message : Y Display Page number : N Display time : Y Display command : Y Allow tab to home : Y Data application : Y Lines to print after page: O Lient to start cursor on: I Full field tab option : N Clear non-storage on RMF: N Allow use of ZAR key : Y Valid atabase commands : FUDPR Other Valid commands : G	29 - ACUTZ EFALTH HAZ
L LPIKKDIS H A A F T P N D S O E O A I E T U I E A T T H Y N A A K N C G I Y P P I C N E U T P T T T T P E O I S M C G I Y P P I C N E U T P T T T T P E O I S M C G I Y P P I C N E U T P T T T P E O I S M C G I Y P P I C N E U T P T T T P E O I S M C G I Y P P I C N E U T P T T T P E O I S M C G I Y P P I C N E U T P T T T P E O I S M C G I Y P P I C N E U T P T T T P E O I S M C M C M C M C M C M C M C M C M C M	54 - (Y/N)
CURRENTLY DEFINED REPORTS - REPORT FILE: CHEH.TRO REPORT NAME: LOCAL ADDED CHEH DESCRIPTION: LISTING OF LOCALLY ADDED CHEHICALS (NON-CHEMASTER) ADDITIONAL APPLICATIONS ACCESSED: CODATA REPORT FILE: CHEH.TRI REPORT NAME: HASTER DESCRIPTION: RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA	CHEMICAL ID NUMBER:
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ODARY DATA	CHEMICAL	COMPONEN:	r (CONT.)		
ORARY DATA					
Oldani Dilli	USED FOR REP	ORTS (DO	NOT USE!}		
ON:	·				
IGH:	<u></u> .				
VGHI: ON SITE: _	<u> </u>				
	F1 - UT	TB FCC	_EV1®		
	F L+HE	LP ESC	-5411		
١	VGLON:	WGHL:	WGILD: 5 ON SITE:	AVGLON:	WGION: ON SITE:

APPLICATION Haster: 1 Find: 1 Enter: 3 Update: 7 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 9 Record Security is DISARLED APPLICATION OPTIONS Alternate ":" character: "." APPLICATION OPTIONS OF Alternate ":" character: "." APPLICATION Alternate ":" character: ":" Alternate "." character: "." Display message : Y Display Page number: N Display response : Y Display command : Y Allow tab to home : Y Data application : Y Lines to print after page: 0 Items to start cursor on: 7 Full field tab option : - Number of oneliners : 20 Clear screen on enter: N Clear non-stored on RNF: N Allow use of ZAP key : Y Allow use of ESC key : Y Valid database commands : EDDRU Other valid commands : GJ	29 - TYPE
L LP KKD S M A A F T P N D S O E O A E T U E A T T M Y N A A K N N C G Y P P C N E U T P T T T T P E O S O N C G Y P P C N E U T P T T T T P E O S O S O S O S O S O S O S O O O O O	155
CURRENTLY DEFINED REPORTS - REPORT FILE: CONTA.TRO REPORT NAME: CHT BY DEPT/AREA DESCRIPTION: CONTAINERS BY DEPT AND AREA ADDITIONAL APPLICATIONS ACCESSED: CODATA, HP, AREA, DEPT REPORT FILE: CONTA.TRI REPORT NAME: PRODUCTS ON HAND DESCRIPTION: REPORT FILE: CONTA.TR2 REPORT FILE: CONTA.TR2 REPORT HAME: MASTER DESCRIPTION: RAW MATA ADDITIONAL APPLICATIONS ACCESSED: CODATA REPORT FILE: CONTA.TR2 REPORT NAME: HASTER DESCRIPTION: RAW MATA ADDITIONAL APPLICATIONS ACCESSED: CODATA REPORT FILE: CONTA.TR3 REPORT NAME: SHELF LIFE DESCRIPTION: LISTING OF CONTAINERS THAT HAVE EXPIRED OR ARE NEARING SHELF LIFE EXPIRATION ADDITIONAL APPLICATIONS ACCESSED: CODATA, HP	CONTAINER ID NUMBER: #MULT CONTAINERS: CONTAINER ID NUMBER: #MULT CONTAINERS: DEST: DEST: DESCRIPTION OF UNKNOWN RELEVED PRODUCT OUT CURRENTLY IN CONTAINER: 1: STORAGE CONTAINER TYPE: 3: STORAGE CONTAINER TYPE: 4: STORAGE CONTAINER TYPE: 5:: DATE PRODUCT RECEIVED/FUT IN CONT: / DATE ENTERED: / DATE CONTAINER OPENED: / DATE CONTAINER OPENED: / DATE CONTAINER RETURED: / DATE CONTAINER RETURED: / DATE PRODUCT EXPIRES: / DATE CONTAINER RETURED: / DATE PRODUCT EXPIRES: / SSIGNED AREA FOR THIS CONTAINER: 6:: ASSIGNED FROCESS FOR THIS CONTAINER: 6:: ASSIGNED PROCESS FOR THIS CONTAINER: 7: UPDATED OR ENTERED BY: F1-HELP ESC-EXIT

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SUMMARY FOR: MFR Application version #: 11 01/11/92	CURRENTLY DEFINED REPORTS -
	REPORT FILE: MFR.TRO
APPLICATION Master: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0 Record Security is DISABLED	REPORT NAME: MASTER DESCRIPTION: RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA
APPLICATION OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display message : Y Display Page number : N Display time : Y Display command : Y Allow tab to home : Y Data application : Y Lines to print after page : O Item# to start uussor on: 1 Full field tab option : - Number of oneliners : 20 Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Valid database commands : FEUDPR	
L LPIKKDIS MAAFTPNDS O E OAIETUIE ATT MYNAAK N N CGIYPPIC NEUTPTTT PE	
1 - PRODUCT MANUFACT 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 2 - URER 0 0 1 N 0 N 0 N 0 N 0 0 0 0 0 0 0 N 0 3 - URER 0 0 0 1 N 0 N 0 N 0 N 0 0 0 0 0 0 0 N 0 0 0 0	
TOTALS: Stored: 158 Keys: 3 Chars on oneliner: 73 Non-stored: 0 Keysize:26 Record size: 163	
MFR 1 PRODUCT MANUFACTURER MANUFACTURER ID_NUMBER: (AUTO FILL)	
MANUFACTURER NAME: ADDRESS LINE 1: ADDRESS LINE 2: CITY: ST: ZIP: DAY PHONE: EMERGENCY PHONED:	
F1-HELP ESC-EXIT	

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SUMMARY FOR: SYN Application version #: 9 01/11/92	CURRENTLY DEFINED REPORTS -
	REPORT FILE: SYN.TRO REPORT NAME: MASTER
APPLICATION Haster: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0	DESCRIPTION: RAW DATA
Record Security is DISABLED	ADDITIONAL APPLICATIONS ACCESSED: CODATA
ADDITATION OF THE STATE OF THE	
APPLICATION OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display message : Y Display Page number : N	
Allow tab to home : Y Data application : Y	
Full field tab option : - Number of oneliners : 20 Clear screen on enter : N Clear non-stored on RNF : N	
Allow use of ZAP key : Y Allow use of ESC key : Y Valid database commands : FEUDDR Other valid commands : G	
L LPIKKDIS NAAFTPNDS O	
L LPIKKDIS MAAFTP NDS O 'E OAIETUIE ATT MYNAAK N N CGIYPPIC NEUTPTTTPE	
1 - CHEMICAL SYNONYH 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 N 0 0 0 0	
4 - R 6 51 Y O N O N O O O 4 O 1 O N 6 5 - (AUTO FILL) 0 01 N O N O N O O O O 0 1 O N O	
6 - SYNONYH 80 11 1 Y 0 N 0 Y 0 0 0 8 0 1 0 N 59 7 - CHEHICAL ID NUMB 0 0 1 N 0 N 0 N 0 0 0 0 1 0 N 0 8 - ER 6 91 1 Y 0 Y 0 Y 0 0 0 4 0 1 0 N 6	
9-1 (73) 51 NON O N O O O 8 O 8 O Y O 10-F1-HELP O O 1 NON O N O O O O O 1 O N O	
11 - ESC-EXIT 0 0 1 N 0 N 0 N 0 0 0 0 0 1 0 N 0 TOTALS: Stored: 92 Keys: 3 Chars on oneliner: 73	
Non-stored: 73 Keyslze:26 Record size: 97	
SYN 1 CHEMICAL SYNONYM	
SYNONYH ID NUMBER: (AUTO FILL)	
зүнонун:	
CHEMICAL ID NUMBER:	
1::·	
F1-HELP ESC-EXIT	
	Į.

SUPPARY FOR: PROC	Application version #: 8	01/11/92	CURRENTLY DEFINED REPORTS -
			REPORT FILE: PROC.TRO REPORT NAME: MASTER
APPLICATION Master: 1 SECURITY Delete: 3 Record Secur	Find: 1 Enter: 3 Print: 1 Batch: 9 rity is DISABLED	Update: 3 Audit: 0	DESCRIPTION: RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA
Display messag Display time Allow tab to h Lines to print Full field tab Clear screen o Allow use of Z	thome : Y Display command home : Y Data application t after page: 0 Item# to start curso to option : - Number of oneliners on enter : N Clear non-stored on	: N : Y : Y	
L E N	LPIKKDIS HAAFTP NOAIETUIE ATT HYN ACGIYPPIC NEUT PT	N D S O A A K N T T P E	
1 - PROCESS WHERE A 0 2 - PRODUCT IS USED 0 3 - 0 5 - PROCESS ID NUMBE 0 6 - R 4 7 - (AUTO FILL) 0 8 - DESCRIPTION 40 9 - F1-HELP 0 10 - ESC-EXIT 0	01 N0N 0 N 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 N 0 0 0 0 0 0 0 0 N 0 0 0 N 0 0 0 1 0 N 0 0 1 0 N 0 0 0 0	
TOTALS: Stored: 44 Non-stored: 0 Record size: 49	Keys: 1 Chars on or Keysize:26		
			,
	SS WHERE A PRODUCT IS USED		
PROCESS ID NUMBER DESCRIPTION:	R: (AUTO FILL)		

SUMMARY FOR: AREA Application version #: 6 01/11/92	CURRENTLY DEFINED REPORTS -
	REPORT FILE: AREA.TRO
APPLICATION Master: 1 Find: 1 Enter: 3 Update: 3 STOURTY Delete: 3 Print: 1 Batch: 9 Audit: 0	REPORT NAME: MASTER DESCRIPTION:
SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0 Record Security is DISABLED	RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA
APPLICATION OPTIONS Alternate ":" character : ":" Alternate "." character : "."	
Display message : Y Display Page number : N	
Allow tab to home : Y Data application : Y Lines to print after page: 0 Item# to start cursor on: 1	
Full field tab option : - Number of oneliners : 20 Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Allow use of ESC key : Y	
Valid database commands : FEUDPR	
L LPIKKDIS HAAFTPNDS O E OA ETU EATTMYNAAKN	
N CGIYPPICNEUTPTTPE	•
1 - AREA IN MHICH A 0 01 NON 0 N 0 0 0 0 0 0 0 N 0 2 - PRODUCT IS USED 0 01 NON 0 N 0 0 0 0 0 0 0 N 0 3 0 1 NON 0 N 0 0 0 0 0 0 0 N 0	
4	
6 - NUMBER 4 51 YON 0 Y 0 0 0 4 0 1 0 N 4 7 - SHORT DESCRIPTIO 0 01 N 0 N 0 0 0 0 0 0 0 N 0	
8 - N 5 9 1 NON 0 Y 0 0 0 8 0 0 0 N 5 9 - LONG 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 0 0 0 0	
11 - F1-HELP 0 01 NON 0 N 0 0 0 0 0 1 0 N 0 12 - ESC-EXIT 0 01 NON 0 N 0 0 0 0 0 1 0 N 0	
TOTALS: Stored: 49 Keys: 1 Chars on oneliner: 51 Non-stored: 0 Keysize:26	
Record size: 54	
•	
AREA 1 AREA IN WHICH A PRODUCT IS USED	
ween the united a trooper in other	
AREA ID NUMBER:	
SHORT DESCRIPTION: LONG DESCRIPTION:	
F1-HELP ESC-EXIT	
	l I

30 - (POUNDS)
31 - QUANTITY
32 - USED
33 - (POUNDS)
34 - VOC EMISSIONS AM
35 - OUNT
36 - (POUNDS)
37 - TIME_ENTERED
38 - DATE ENTERED
39 - USERNAME
40 - FI-HELP
41 - ESC-EXIT 0 0 10 0 0 N O N N O N N O N N O N N O N N O N N O N N O N N O N N O N N O N N O N 0 1 0 1 52 1 0 1 0 1 62 1 72 1 80 1 88 1 0 1 000000031000 000000000000 000000099900 и и и и и и и и и и и и и и и 00000000000 002002022800 01/11/92 Application version #: 44 SUMMARY FOR: POUA 10 0 10 0 8 8 8 0 10 0 0 0 0 0 Update: 9 Audit: 9 Master: 1 Delete: 3 Find: 1 Print: 1 Enter: 9 Batch: 9 Record Security is DISABLED Mossage: CTRL: F-FIND, D-DELETE
Alternate ":" character : ":"
Display message : Y
Display time : Y
Allow tab to home : Y
Lines to print after page: 0
Full field tab option : Clear screen on enter : N
Allow use of ZAP key : Y
Valid database commands : FDPR TOTALS: Stored: Chars on oneliner: 69 APPLICATION OPTIONS Keys: 3 Keysize:26 Alternate "." character : "."
Display Page number : N
Display command : Y
Data application : Y
Item# to start cursor on: 1
Number of oneliners : 20
Clear non-stored on RNF : Y
Allow use of ESC key : Y Non-stored: Record size: LP|KKD|S OA|ETU|E CG|YPP|C F T P N M Y N A T P• T T A T U L E N - HISTORY OF PRODU - CT QTYS RCVD OR - USED 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 6 5 1 0 0 1 6 5 1 0 0 1 6 11 1 (34) 5 1 4 17 1 (30) 39 1 (40) 69 1 4 25 1 (40) 69 1 0 0 0 1 5 29 1 (15) 149 0 1 0 0 0 1 8 34 1 0 0 0 1 8 34 1 1 0 0 0 1 8 34 1 0 0 0 1 8 34 1 1 0 0 0 1 8 34 1 1 0 0 0 1 8 34 1 1 0 0 0 1 4004848048048002800202 POUR 1 HISTORY OF PRODUCT OTY'S RCVD OR USED CURRENTLY DEFINED REPORTS -.4:: PLANT: 5::
PROCESS ID NUMBER: 2::
AREA ID NUMBER: 1::
EMPLOYEE INITIATING REQUEST: CONTAINER HISTORY FROM PERIOD TO PERIOD ADDITIONAL APPLICATIONS ACCESSED: CODATA, HP, CONTA, EMPL DATE PRODUCT USED OR RECEIVED: __/___. REPORT FILE: POUA.TRI
REPORT NAME: ROUTINE VOC EMS
DESCRIPTION:
ROUTINE VOC EMISSIONS BY AREA AND DEPARTMENT] QUANTITY RECEIVED: _____. (POUNDS) QUANTITY USED: _____. (POUNDS) ADDITIONAL APPLICATIONS ACCESSED: CODATA, CONTA, DEPT, AREA, HP, HPHC, MCCAT _. (POUNDS) VOC EMISSIONS AMOUNT: ___ TIME_ENTERED: __:__:_ DATE_ENTERED: __/___. USERNAME: _ F1-HELP ESC-EXIT REPORT FILE: PQUA.TR2 REPORT NAME: MASTER DESCRIPTION: RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA REPORT FILE: PQUA.TR3
REPORT NAME: INVALID EMP DEPT
DESCRIPTION:
CONTAINERS THAT WERE DRAWN DOWN BY EMPLS THAT WERE FROM
INVALID DEPTS ADDITIONAL APPLICATIONS ACCESSED: CODATA, EMPL, CONTA

COMPANY PARCEPAGES And Land of the Control of the C	29 - F1-HELP 0 01 NON 0 N 0 0 0 0 1 0 N 0 30 - ESC-EXIT 0 01 NON 0 N 0 0 0 0 1 0 N 0
SUMMARY FOR:CHEMCHEM Application version #: 17 01/11/92	TOTALS: Stored: 29 Keys: 2 Chars on oneliner: 23 Non-stored: 176 Keysize:26
APPLICATION Master: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0 Record Security is DISABLED	Record size: 34
APPLICATION OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display message : Y Display Page number : N Display command : Y Allow tab to home : Y Data application : Y Lines to print after page: O Item# to start cursor on: 1 Full field tab option : - Number of concliners : 20 Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Allow use of ESC key : Y Valid database commands : G	
L LPIKKDIS HAAFTP NDS O E OAIETUIE ATT HYN AAK N N CGIYPPIC NEUT PTTT PE	
1 - CHEHICAL MIXTURE 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 N 0 2 - SAND COMPONENT 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 3 - CHEMICALS 0 0 1 N 0 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 4 0 0 1 N 0 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 0 5 - 0 0 0 0 N 0 0 0 0 0 0 0 0 N 0 0 0 0 0	
CURRENTLY DEFINED REPORTS - REPORT FILE: CHEMCHEM.TRO REPORT NAME: HASTER DESCRIPTION: RAM DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA	CHEMICAL MIXTURES AND COMPONENT CHEMICALS CHEMICAL ID NUMBER FOR MIXTURE: CAS\$1:: CREMICAL ID NUMBER FOR MIXTURE COMPONENT: CAS\$2:: LOW PERCENTAGE IN THIS MIXTURE 1: (PERCENT) HIGH PERCENTAGE IN THIS MIXTURE 2: (PERCENT) TENDS TOWARD <- OR >- OF PERCENT LOW: (L/G) F1-HELP ESC-EXIT

SUMMARY FOR: HPCREM Application version #: 19 01/11/92	TOTALS: Stored: 36 Keys: 3 Chars on oneliner: 21 Non-stored: 114 Keysize: 26 Record size: 41
APPLICATION Master: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0 Record Security is DISABLED	
APPLICATION OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display message : Y Display Page number : N Display time : Y Display command : Y Allow tab to home : Y Data application : Y Lines to print after page : O Item# to start cursor on: I Full field tab option : N Number of onelinors : 20 Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Allow use of ESC key : Y Valid database commands : GY	
L LP KKD S M A A F T P N D S O E O A E T U E A T T M Y N A A K N N CG YPP C N E U T P T T T P E	
1 - CHEMICAL COMPONE 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 N 0 2 - NT 0 0 N 1 N 0 N 0 N 0 N 0 0 0 0 0 0 0 N 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 0 N 0 0 0 0 0 0 0 0 0 N 0	
CURRENTLY DEFINED REPORTS - REPORT FILE: HPCHEM.TRO REPORT NAME: TIER II SUB TILS DESCRIPTION: TIER II SUB TOTALS, AVG DAILY AMOUNT, MAX DAILY AMOUNT, NO. DAYS ON SITE ADDITIONAL APPLICATIONS ACCESSED: PQUA	HPCHEM 1 CHEMICAL COMPONENTS OF AN HP HAZARDOUS PRODUCT ID NUMBER: 3:: CHEMICAL ID NUMBER: LOW PERCENTAGE IN THIS PRODUCT 1: HIGH PERCENTAGE IN THIS PRODUCT 2: . ** HIGH PERCENTAGE IN THIS PRODUCT 2: . **
REPORT FILE: HPCHEM.TRI REPORT NAME: MASTER DESCRIPTION: RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA	ирспен:
REPORT FILE: HPCHEM.TR2 REPORT NAME: TIER II REPORT DESCRIPTION: TIER II REPORT (MAKES USE OF TIER II SUBTIL REPORT) ADDITIONAL APPLICATIONS ACCESSED: PQUA, CODATA, CHEM. CONTA, AREA, TPQ302	F1-HELP ESC-EXIT CTRL Y - MASS ENTRY
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SUMMARY FOR: HPCHASS Application version 6: 37 01/11/92 APPLICATION Haster: 1 Find: 9 Enter: 9 Update: 9 SECURITY Delete: 9 Print: 9 Batch: 9 Audit: 0 Record Security is DISABLED	29 - EC (6) 83 1 NON O Y O O O 2 2 8 O N O 30 - ED (6) 89 1 NON O Y O O O 2 2 8 O N O 31 - FA (6) 89 1 NON O Y O O O O 2 2 8 O N O 32 - FB (6) 95 1 NON O Y O O O O 4 O 8 O N O 32 - FB (6) 95 1 NON O Y O O O 4 O 8 O N O 33 - FC (6) 101 1 NON O Y O O O 0 2 2 8 O N O 34 - FD (6) 101 1 NON O Y O O O O 2 2 8 O N O 34 - FD (6) 101 1 NON O Y O O O O 2 2 8 O N O 35 - GA (6) 113 1 NON O Y O O O O 4 O 8 O N C 36 - GB (6) 113 1 NON O Y O O O 0 4 O 8 O N C 37 - GC (6) 113 1 NON O Y O O O 0 2 2 8 O N O 38 - GD (6) 125 1 NON O Y O O O 2 2 8 O N O 38 - GD (6) 125 1 NON O Y O O O 2 2 8 O N O 38 - GD (6) 125 1 NON O Y O O O 2 2 8 O N O 39 - HA
APPLICATION OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display message : Y Display page number : N Display time : Y Display command : Y Allow tab to home : N Data application : N Lines to print after page: 0 Leme to start cursor on: 1 Full field tab option : - Number of oneliners : - Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Valid database commands : Cother valid commands : SN	40 - HB (6) 131 1 N O N O Y O O O 2 2 8 O N O 42 - HD (6) 137 1 N O N O Y O O O 0 2 2 8 O N O 42 - HD (6) 137 1 N O N O Y O O O O 2 2 8 O N O 42 - HD (6) 143 1 N O N O Y O O O O 2 2 8 O N O 0 43 - JA (6) 143 1 N O N O Y O O O O 2 2 8 O N O O 44 - JB (6) 149 1 N O N O Y O O O O 0 4 O 8 O N O O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
L LPIKKDIS H A A F T P N D S O E O A I E T U I E A T T H Y N A A K N N C G I Y P P I C N E U T P T T T P E O A I E T U I E A T T M Y N A A K N N C G I Y P P I C N E U T P T T T P E O C T C T C T C T C T C T C T C T C T C	10
8 - CHPMIDI	CURRENTLY DEFINED REPORTS - NONE DEFINED
HPCHASS 1 CHEMICAL COMPONENTS OF AN HP MASS ENTRY HPID\$ CHEMID\$ LOW\$ HIGH\$ AA:	

F1-HELP

SUMMARY FOR: PROCHP Application version #: 10 01/11/92	CURRENTLY DEFINED REPORTS -
	REPORT FILE: PROCHE.TRO REPORT NAME: MASTER
APPLICATION Master: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0	REPORT NAME: MASTER OESCRIPTION: RAW DATA
SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0 Record Security is DISABLED	ADDITIONAL APPLICATIONS ACCESSED: CODATA
APPLICATION	
OPTIONS Alternate ":" character : ":" Alternate " character : "." Display message : Y Display Page number : N Display time : Y Display command : Y Allow tab to home : Y Data application : Y	
Display time : Y Display command : Y Allow tab to home : Y Data application : Y Lines to print after page: 0 Item# to start cursor on: 1	
Allow tab to nome Lines to print after page: 0 Items to start cursor on: 1 Full field tab option : - Number of oneliners : 20 Clear screen on enter : N Clear non-stored on RNF: N Allow use of ZAP key : Y Allow use of ESC key : Y	
Other valid commands : G	
L LPIKKOIS MAAFTPNDS O E OAIETULE ATT MYNAAK N N CGIYPPIC NEUTPTTPE	
1 - HAZARDOUS PRODUC 0 01 N 0 N 0 0 0 0 0 0 0 0 N 0 2 - TS ALLOWED IN A 0 01 N 0 N 0 N 0 0 0 0 0 0 N 0 3 - PROCESS 0 01 N 0 N 0 N 0 0 0 0 0 0 0 N 0	
4 0 01 NON 0 NO 0 0 0 0 0 N 0	
6	
8 - R 4 51 Y0Y 0 Y 0 0 0 4 0 1 0 N 4 9 - 1 (40) 51 N 0 N 0 N 0 0 0 8 0 8 0 Y 0 10 - HAZARDOUS PRODUC 0 0 1 N 0 N 0 N 0 0 0 0 1 0 N 0	
11 - T ID 0 0 1 N 0 N 0 N 0 0 0 0 1 0 N 0	
13 - 2 (34) 45 1 NON 0 N 0 0 0 8 0 8 0 Y 0	
15 - PROCHP 10 15 1 Y 0 N 9 N 0 0 0 8 0 1 0 N 0 16 - FI-HELP 0 0 1 N 0 N 0 N 0 0 0 0 0 1 0 N 0 17 - ESC-EXIT 0 0 1 N 0 N 0 N 0 0 0 0 1 0 N 0	
17 - ESC-EXIT 0 01 NON 0 N 0 0 0 0 1 0 N 0 TOTALS: Stored: 20 Keys: 3 Chars on oneliner: 11	
Non-stored: 74 Keysize:26 Record size: 25	
PROCEP 1	
HAZARDOUS PRODUCTS ALLOWED IN A PROCESS	
PROCESS ID NUMBER: 1::	
HAZARDOUS PRODUCT ID NUMBER: 2::	
KEY PROCHP:	
F1-HELP ESC-EXIT	
,	

APPLICATION Haster: 1 Find: 9 Enter: 9 Update: 9 Delete: 9 Print: 9 Batch: 9 Audit: 0 Record Security is DISABLED APPLICATION OPTIONS Alternate ":" character: ":" Alternate "." character: ":" Alternate "." character: "." Display message: Y Display Page number: N Display time: Y Display command: N Lines to print after page: 0 Item# to start cursor on: N Item# to	29 - CB
L LP KKD S M A A F T P N D S O	S5 - FF
### STATE	CONTAINER STATUS CRANGE MASS ENTRY CNT\$ AREA\$ PROC\$ DATE EMPL UNIT GTY_USED AA: AB: AC: AD: AC: BE: BC: BC: BF: CA: CT: CT: CC: CC: CC: CC: CC: CC: CC: CC

UMMARY FOR: AUDIT Appli	.cation version #: 6	01/11/92	CURRENTLY DEFINED REPORTS -
			REPORT FILE: AUDIT.TRI REPORT NAME: YARD COMPARE
LICATION Master: 5 SECURITY Delete: 5 Record Security 1	Find: 5 Enter: 5 Print: 5 Batch: 9	Update: 5 Audit: 0	DESCRIPTION: COMPARISON OF YARD DATA VS WHAT IS IN THE SYSTEM
Kecord Security 1	3 DISKDED		ADDITIONAL APPLICATIONS ACCESSED: CODATA, CONTA, UNIT, HP, AREA
LICATION Message: CTRL: F-I OPTIONS Alternate ": chara	TIND ictor : ":" Alternate "." chara	ictor · * *	
OPTIONS Alternate ":" chara Display message Display time	: Y Display Page number : Y Display command	: N : Y	
Allow tab to home Lines to print afte	: Y Data application or page: 0 Item# to start curs on : - Number of oneliners	: Y sor on: 1 : 20	
Full field tab opti Clear screen on ent Allow use of ZAP ke	er : N Clear non-stored or y : Y Allow use of ESC ke	RNF: N	
Valid database com	mands : FR		
L L	DIVVDIC W A A P T D	N D S O	
E O N C	P K K D S M A A F T P A E T U E A T T M Y N G Y P P C N E U T P T	AAKN	
2 0 0	1 NON O N O O O O O O 1 NON O N O O O O	0 0 N 0 0 0 N 0	
3 - CONTAINER# 6 5 4 - AUDIT 0 0	1 NON O N O O O O	1 0 N 6 0 0 N 0 0 0 N 8	
6 - AUDIT 0 0 7 - TIME 8 19	1 NON O N O O O O O 1 NON O N O O O 3 2 O	0 0 N 0	
8 - AREA 4 27 9 - 1 (40) 5	1 NON O N O O O 8 O	0 0 N 4 8 0 N 0 0 0 N 10	
11 - UNIT 1 40 12 - 2 (15) 45	1 NON O N O O O 8 O 1 NON O N O O O 8 O	0 0 N 4 8 0 N 0	
13 - F1=HELP 0 0	1 NON 0 N 0 0 0 0 0 0 1 NON 0 N 0 0 0 0 0 0	1 0 N 0 1 0 N 0	
Non-stored: 55 Keys	s: 1 Chars on c	oneliner: 45	
Record size: 41			
WDIT 1	YARD AUDIT		
court then 4.	<u></u>		
CONTAINER#: AUDIT DATE:/	AUDIT TIME:::		
AREA: 1::		•	
QUANTITY:	JNIT: 2::		
F1=	HELP ESC-EXIT		

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SUMMARY FOR: HPMC	Application version #: 9 01/11/92	CURRENTLY DEFINED REPORTS ~
PPLICATION Master SECURITY Delete Record		REFORT FILE: HPMC.TRI REFORT NAME: MASTER DESCRIPTION: RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA
Display Display Allow to Lines to Full fie Clear so Allow us Valid o	e e: character : ":" Alternate "." character : "." message : Y Display Page number : N time : Y Display Command : Y b to home : Y Data application : Y b print after page: 0 Item# to start cursor on: 1 ald tab option : - Number of oneliners : 20 rreen on enter : N Clear non-stored on RNF : N te of ZAP koy : Y Allow use of ESC key : Y tatabase commands : FEUDPR c valid commands : G	
	L LPIKKOIS HAAFTPN DS O E OAIETUIE ATT MYN AAK N N CGIYPPICN E UTPTTT PE	
1 - HAZARDOUS PRODUC 2 - T MARINE COATING 3 - 5 - HAZARDOUS PRODUC 6 - T ID 7 - NUMBER 8 - I 9 - HARINE COATING C 10 - ATEGORY 11 - 2 12 - FI-HELP 13 - ESC-EXIT	N CG Y P P C N E U T P T T T P E 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 0 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 0 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 0 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 0 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 1 0 N 0 0 0 1 N 0 N 0 N 0 0 0 0 0 0 1 0 N 0 0 0 1 N 0 N 0 N 0 0 0 0 0 0 1 0 N 0 6 5 1 Y 0 Y 0 Y 0 0 0 4 0 1 0 N 6 4 111 Y 0 Y 0 Y 0 0 0 0 8 0 1 0 N 4 111 Y 0 Y 0 Y 0 0 0 0 8 0 1 0 N 4 15 1 N 0 N 0 N 0 N 0 0 0 0 8 0 8 0 Y 0 0 0 1 N 0 N 0 N 0 0 0 0 0 0 1 0 N 0 0 0 1 N 0 N 0 N 0 0 0 0 0 0 1 0 N 0 0 0 1 N 0 N 0 N 0 0 0 0 8 0 8 0 8 0 Y 0 0 0 1 N 0 N 0 N 0 N 0 0 0 0 0 1 0 N 0 0 0 1 N 0 N 0 N 0 N 0 0 0 0 0 0 1 0 N 0	
TOTALS: Stored: Non-stored: Record size:	10 Keys: 2 Chars on oneliner: 11 90 Keysize:26 15	
HPMC 1	HAZARDOUS PRODUCT MARINE COATING	
HAZARDGUS PRODUCT I	NUMBER:	
MARINE COATING CATEG	1:: 50RY: 2::	
	F1=HELP ESC=EXIT	

SUMMARY FOR:	MCCAT	Application versi	on #: 7	01/11/92
CATION	Haster: Delete:	<pre>3 Print: 1</pre>	Enter: 3 Batch: 9	Update: 3 Audit: 0
	Record S	Security is DISABLED		
ATION				
TIONS	Alternate Display me	":" character : ":"	Alternate "." o Display Page no Display command	umber : "
	Allow tab	essage : Y ime : Y to home : Y print after page: 0	Data application	on : Y cursor on: 1
	Clear scre		Number of onel Clear non-store Allow use of E	ed on RNF: N SC key: Y
	Valid dat	tabase commands : FEU	OPR	
		L LPIKKDI E OAIETUI	S M A A F T E A T T M Y C N E U T P	PNDS C NAAK M TTTP E
- MARINE C	COATINGS	0 01 NON	0 N 0 0 0 0	0 0 0 N C
- VOC LIMI - RIES	T CATEGO	0 01 NON	0 N 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
		0 01 NON 0 01 NON	0 N 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 N C
COATINGCATEGORYG/LITER	•	4 51 YON	0	0 1 0 N 4
- S APPLII - 89	D 9/1/	0 01 NON 4 91 NON	0 N 0 0 0 0 0 0 0 Y 0 0 0 2	000N (
- COATING - ION - F1-HELP	DESCRIPT	0 01 NON 50 131 NON 0 01 NON	0 Y 0 0 0 8	0 0 0 N 0
- ESC-EXI		0 01 NON	0 N O O O O	0 1 0 N (
Non-	Stored: -stored: :d size:	58 Keys: 1 0 Keysize:26 63	Chars	on oneliner: 60
AT 1	МЖМ	RINE COATINGS VOC LIMIT	r categories	
	ATEGORY: IMITS AS APP	 PLIED 9/1/89:		
	ESCRIPTION:			·
				
		F1-HELP ESC-E	XIT	

SUMMARY FOR: STYP Application version #: 5 01/11/92	CURRENTLY DEFINED REPORTS -
APPLICATION Master: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Frint: 1 Batch: 9 Audit: 0 Record Security is DISABLED	REPORT FILE: STYP.TRO REPORT NAME: MASTER DESCRIPTION: RAW DATA
APPLICATION OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display message : Y Display Page number : N Display time : Y Display command : Y Allow tab to home : Y Data application : Y Lines to print after page: 0 Item# to start cursor on: 1 Full field tab option : - Number of oneliners : 20 Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Allow use of ESC key : Y Valid database commands : FEUDPR	ADDITIONAL APPLICATIONS ACCESSED: CODATA
L L	•
6 - F1=HELT 0 0 1 N 0 N 0 N 0 0 0 0 0 1 0 N 0 0 7 - ESC-EXIT 0 0 1 N 0 N 0 N 0 0 0 0 0 1 0 N 0 0 TOTALS: Stored: 36 Keys: 1 Chars on oneliner: 37 Non-stored: 0 Keysize:26 41	
·	
STORAGE TYPE STORAGE TYPE CODE: DESCRIPTION:	

SUMMARY FOR: HMISPPI Application version #: 7 01/11/92	CURRENTLY DEFINED REPORTS -
APPLICATION Haster: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0 Record Security is DISABLED	REPORT FILE: HMISPFI.TRO REPORT NAME: MASTER DESCRIPTION: RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA
APPLICATION OPTIONS Alternate ": character : ": Alternate ". character : "." Display massage : Y Display Page number : Y Display tome : Y Display command : Y Allow tab to home : Y Data application : Y Lines to print after page: 0 Item# to start cursor on: 1 Full field tab option : Number of oneliners : 20 Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Allow use of ESC key : Y Valid database commands : FEUDER	
L LPIKKDIS HAAFTPNDS O E OAIETUIEATT HYNAAK N N CGIYPPICNEUTPTTTPE	
1 - HMIS PERSONAL PR 0 01 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 2 - OGECTION INDEX 0 01 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 3 - OGECTION INDEX 0 01 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 0 0 0	
TOTALS: Stored: 81 Keys: 1 Chars on oneliner: 52 Non-stored: 0 Keysize:26 Rocord size: 86	
	

F1=HELP ESC=EXIT

HMIS PERSONAL PROTECTION INDEX

HMISPPI 1

PERSONAL PROTECTION INDEX: _.
REQUIRED PROTECTION: ____

-	
SUMMARY FOR: EMISI Application version #: 5 01/11/92	CURRENTLY DEFINED REPORTS - REPORT FILE: HHISI.TRO
APPLICATION Haster: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0 Record Security is DISABLED	REPORT NAME: MASTER DESCRIPTION: RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA
APPLICATION OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display massage : Y Display Page number : N Display time : Y Display command : Y Allow tab to homse : Y Data application : Y Lines to print after page: O Item# to start cursor on: 1 Full field tab option : - Number of oneliners : 20 Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP ksy : Y Allow use of ESC key : Y Valid database commands : FEUDPR	
L LPIKKDISHAAFTPNDSO E OAIETUIEATTHYNAAK N N CGIYPPICNEUTPTTTPE	
1 - HNIS FAZARD INDE 0 01 NON 0 NO 0 0 0 0 0 0 N 0 2 - X 0 01 NON 0 NO 0 NO 0 0 0 0 0 N 0 0 0 0 N 0 0 0 0	
TOTALS: Stored: 21 Keys: 1 Chars on oneliner: 22 Non-stored: 0 Keysize:26 Racord size: 26	
RMISI 1 HMIS FAZARD INDEX FAZARD INDEX:	
DESCRIPTION:	

F1-HELP ESC-EXIT

SUMMARY FOR: N	FPARE	Application vers	lon #: 5	01/11/92	CURRENTLY DEFINED REPORTS -	_
PPLICATION SECURITY	Haster: Delete: Record Se		Enter: 3 Batch: 9	Update: 3 Audit: 0	REPORT FILE: NFPARE.TRO REPORT NAME: MASTER DESCRIPTION: RAW DATA ADDITIONAL APPLICATIONS ACCESS	ED:
	Display me: Display ti Allow tab (":" character : ":" ssage : Y me : Y to home : Y rint after page: 0 tab option : - an on enter : N of ZAP key : Y abase commands : FE	Display Page n Display comman Data applicati Item# to start	on : Y cursor on: 1 liners : 20 red on RNF : N		
1 - NFPA REACT 2 - S - REACTIVITY 4 - CODE 5 - DESCRIPTIO 6 - F1-HELP 7 - ESC-EXIT	IVITY :	0 01 NON 0 01 NON 0 01 NON 1 51 YON 23 61 NON 0 01 NON 0 01 NON		7 T T T P E 0 0 0 0 N 0 0 0 0 0 N 0 0 0 1 0 N 0 0 0 1 0 N 1 3 0 0 0 N 2 3 0 0 1 0 N 0 0 0 1 0 N 0		
TOTALS: St Non-st Record	ored:	24 Keys: 1 0 Keysize:26 29		s on oneliner: 25		
					·	
NFPARE 1		NEPA REACTIVIT VITY CODE: PTION:	<u>.</u>			
		F1=HELP ESC=E	xır			

SUMMARY FOR: NFPASN Application version #: 6 01/11/92	CURRENTLY DEFINED REPORTS -
	REPORT FILE: NFPASN.TRO REPORT NAME: MASTER
APPLICATION Haster: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0	DESCRIPTION: RAW DATA
Record Security 15 DISABLED	ADDITIONAL APPLICATIONS ACCESSED: CODATA
APPLICATION	
OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display message : Y Display Page number : N	
Display time : Y Display command : Y Allow tab to home : Y Data application : Y Lines to print after page: 0 Item# to start cursor on: 1	
Full field tab option : - Number of oneliners : 20 Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Allow use of ESC key : Y	
Valid database commands: FEUDPR	
L LPIKKDIS MAAFTPNDS O E OAIETUIEATT MYNAAK N N CGIYPPIC NEUTPTTTPE	
1 - NFPA SPECIAL NOT 0 01 NON 0 N 0 0 0 0 0 0 N 0	
2 - ICE 0 01 NON 0 N 0 0 0 0 0 0 0 N 0 3 0 01 NON 0 N 0 0 0 0 0 0 N 0 4 0 01 NON 0 N 0 0 0 0 0 0 0 N 0	
5 - SPECIAL NOTICE C 0 01 N 0 N 0 N 0 0 0 0 0 1 0 N 0 6 - ODE 1 51 Y 0 N 0 Y 0 0 0 B 0 1 0 N 1 7 - ABBREVIATED DESC 0 01 N 0 N 0 N 0 0 0 0 0 0 0 N 0	
8 - RIPTION 4 61 NON 0 Y 0 0 0 8 0 0 0 N 4 9 - DESCRIPTION 23 101 NON 0 Y 0 0 0 8 0 0 0 N 23	
10 - FI-HELP 0 01 NON 0 N 0 0 0 0 0 1 0 N 0 1 - ESC-EXIT 0 01 N 0 N 0 N 0 0 0 0 0 1 0 N 0	
TOTALS: Stored: 28 Keys: 1 Chars on oneliner: 30 Non-stored: 0 Keysize:26 Record size: 33	

NFFASN 1 NFFA SPECIAL NOTICE	
SPECIAL NOTICE CODE:	
ABBREVIATED DESCRIPTION:	
DESCRIPTION:	
F1-HELP ESC-EXIT	

	H Application versi	on #: 4	01/11/92	CURRENTLY DEFINED REPORTS -
SECURITY D	ster: 1 Find: 1 lete: 3 Print: 1 leord Security is DISABLED	Enter: 3 Batch: 9	Update: 3 Audit: 0	REPORT FILE: NFPAHR.TRO REPORT NAME: MASTER DESCRIPTION: RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODA:
Dis Alle Line Ful. Cle.	prinate ":" character : ":" play mossage : Y play time : Y we tab to home : Y so print after page: 0 ifield tab option : - ir screen on enter : N we use of ZAP key : Y ild database commands : FEU	Display command Data application of the Start Number of onel! Clear non-store Allow use of Es	i : Y	
1 - NFPA REALTH R 2 - RDS 3	E O A I E T U N C G I Y P P N C G I Y P P N C G I Y P P N C C O O 1 N O N O O 1 N O N O O 1 N O N O O 1 N O N O O 1 N O N O O 1 N O N O O 1 N O N O O 1 N O N O O 1 N O N O O 1 N O N O O 1 N O N O O 0 N O N O O 1 N O N O O 1 N O N O O 1 N O N O O N C Keysize:26		N A A K N T T T P E O O O N O O O O N O O O O N O O O O N O O I O N O O I O N O O I O N O O I O N O	
FPARE 1	NFPA HEALTH HAZA	RDS		
	HEALTH HAZARD CODE: DESCRIPTION:	·		
	F1=HELP ESC=E	XIT		

SUMMARY FOR:	NFPAFH		Applica	ation	ve.	rsion	ł:	5				0	1/11	/92	-	CURRENTLY DEFINED REPORTS -
APPLICATION SECURITY	Master Delete Record	: 3	P: rity is	Find: rinc: DISA	: 1	D		Enter	r: 3 h: 9			Up:	date	: 3	-	REPORT FILE: NFPAFH.TRO REPORT NAME: MASTER DESCRIPTION: RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA
APPLICATION OPTIONS	Alternat Display Display Allow ta Lines to Full fise Clear so Allow us Valid d	time b to b print ld tab reen c	ge home t after b option on enter ZAP key	page n r		Y Y Y Y	Disp Disp Data Item Numb Clea	play play a app mi to per o	Page commolication of or on-st	and mand atio art noli	mber I n curs ners	OF	on:	N Y 1 20 N	-	
#=====================================		L E N	L P O A C G	K E	K D T U P P	I S I E I C	M A N	A A	A F	T Y P	P N T	N A	D S		O N E	
1 - NFPA FIF 2 - S 3	LARD LION	0 0 0 0 0 1 23 0	0 1 0 1 0 1 0 1 5 1 6 1 0 1	и и и ч	0 N N O O N N O O N N O O N N O O N N	00000	N N Y Y	000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0000880	0000000	0 0 1 1 0	0 N 0 N 0 N 0 N 0 N 0 N	1 2	0 0 0 0 0 0 0 0 1 3 0	
Non-	Stored: -stored: -d size:	24 0 29	Keys: Keysi						Ch	ars	on o	nel	iner	: 2	5	
																·
NFPAFR 1			HEPA :	FIRE	HAZ	ARDS										
		: EAZAI :RIPTIC	RD CODE	· _·												

F1-HELP ESC-EXIT

	PCOND	Application version	†: 5	01/11/92	CURRENTLY DEFINED REPORTS -
PLICATION SECURITY	Master: 1 Delete: 3 Record Sect	Find: 1 Print: 1 Urity is DISABLED	Enter: 3 Batch: 9	Update: 3 Audit: 0	REPORT FILE: PCOND.TRO REPORT NAME: MASTER DESCRIPTION: RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA
PLICATION OPTIONS	Display mess: Display time Allow tab to Lines to pri: Full field t: Clear screen Allow use of	: Y	Display Page num Display command Data application Item# to start of Number of onelin Clear non-stored Allow use of ESG	E Y	
1 - PRESSURE	L E N CONDITI 0	OAIETUIE CGIYPPIC		0 0 0 N 0	
2 - ON 3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	01 NON 0 01 NON 0 01 NON 0 01 NON 0 51 YON 0 61 NON 0	N 0 0 0 0 0 0 N 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 N 0 0 0 0 N 0 0 1 0 N 0 0 1 0 N 0 0 1 0 N 1 0 0 0 N 35 0 1 0 N 0	
Non-	Stored: 36 stored: 0	Keys: 1 Keysize:26		on queliner: 37	
OND 1					
	PRESSURE TYP	PRESSURE CONDITION E CODE FOR TIER II R			
	DESCRIPTION:			•	
		F1=HELP ESC=EXI	r		
		F1=HELP ESC=EXI	т		

SUMMARY FOR: 1COND Application version #: 7 01/11/92	CURRENTLY DEFINED REPORTS - REPORT FILE: TCOND.TRO REPORT NAME: MASTER
APPLICATION Mester: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0 Record Security is DISABLED	DESCRIPTION: RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA
APPLICATION OPTIONS Alternate ": character : ": Alternate ". character : "." Display message : Y Display Page number : N Display time : Y Display command : Y Allow tab to home : Y Data application : Y Lines to print after page: 0 Item# to start cursor on: 1 Full field tab option : - Number of oneliners : 20 Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Allow use of ESC key : Y Valid database commands : FEUDPR	
L LPIKKDIS MAAFTPNDS O E OAIETUIEATT MYNAAK N N CGIYPPIC NEUTPTT PE	
1 - TEMPERATURE COND 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 N 0 2 - ITION 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 N 0 0 3 - ITION 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 N 0 0 0 0	
TOTALS: Stored: 41 Keys: 1 Chars on oneliner: 42 Non-stored: 0 Keysize:26 Record size: 46	
TCOND 1 TEMPERATURE CONDITION	
TIER II TEMPERATURE TYPE CODE: TEMPERATURE TYPE DESCRIPTION:	
F1-HELP ESC-EXIT	

SUMMARY FOR: TTRANGE Application version #: 6 01/11/92	CURRENTLY DEFINED REPORTS
	REPORT FILE: TTRANGE.TRO
PPLICATION Master: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0	REPORT NAME: MASTER DESCRIPTION: RAW DATA
Record Security is DISABLED	ADDITIONAL APPLICATIONS ACCESSED:
PLICATION	
OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display message : Y Display Page number : N	
Allow tab to home : Y Data application : Y Lines to print after page: 0 Item# to start cursor on: 1	
PRICATION OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display message : Y Display Page number : N Display time : Y Display Command : Y Allow tab to home : Y Data application : Y Lines to print after page : O Tem# to scart cursor on: 1 Full field tab option : - Number of oneliners : 20 Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Allow use of ESC key : Y	
Valid database commands : FEUDPR	
L LPIKKDIS HAAFTPNDS O E OAIETUIEATTHYN AAK N N CGIYPPICN EUTPTTTP	
1 - TIER II REPORTIN 0 01 NON 0 N 0 0 0 0 0 0 N 0	
2 - G RANGES 0 0 1 N 0 N 0 N 0 0 0 0 0 0 N 0 0 0 0 0	
5 - REPORTING RANGE 0 01 NON 0 N 0 0 0 0 0 1 0 N 0 6 - FOR TIER II REPO 0 01 N 0 N 0 N 0 0 0 0 0 1 0 N 0	
7 - RT 2 51 Y 0 N 0 Y 0 0 0 8 0 1 0 N 2 8 - LOWER VALUE FOR 0 01 N 0 N 0 N 0 0 0 0 0 0 0 N 0 9 - THIS 0 01 N 0 N 0 N 0 0 0 0 0 0 0 N 0	
10 - CODE 12 71 NON 0 Y 0 0 0 2 0 0 0 N 12	
13 - THIS CODE 12 19 1 N 0 N 0 Y 0 0 0 2 0 0 0 N 12 14 - (POUNDS) 0 0 1 N 0 N 0 N 0 0 0 0 0 0 N 0	
15 - F1-HELP 0 01 N 0 N 0 N 0 0 0 0 1 0 N 0 16 - ESC-EXIT 0 01 N 0 N 0 N 0 0 0 0 0 1 0 N 0	
TOTALS: Stored: 26 Keys: 1 Chars on oneliner: 28 Non-stored: 0 Keysize:26	
Record size: 31	
TRANGE 1	
TIER II REPORTING RANGES	
REPORTING RANGE FOR TIER II REPORT:	
LOWER VALUE FOR THIS CODE: (POUNDS) UPPER VALUE FOR THIS CODE: (POUNDS)	
	1
F1=HELP ESC=EXIT	

SUMMARY FOR: UNIT Application version #: 12 01/11/92	CURRENTLY DEFINED REPORTS -
	REPORT FILE: UNIT.TRO
APPLICATION Haster: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0 Record Security is DISABLED	REPORT NAME: MASTER DESCRIPTION: RAW DATA
4	ADDITIONAL APPLICATIONS ACCESSED: CODATA
APPLICATION OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display message : Y Display Page number : N Display time : Y Display command : Y Allow tab to home : Y Data application : Y Lines to print after page: 0 Item# to start cursor on: 1 Full field tab option : Number of oneliners : 20 Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Allow use of ESC key : Y Valid database commands : FEUDPR	
L LPIXXDIS MAAFTPNDS O E OAIETUIEATT MYNAAX N N CGIYPPICNE UTPTTPE	
1 - CONTAINER UNIT 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 2 0 0 1 N 0 N 0 N 0 N 0 0 0 0 0 0 0 N 0 0 0 0	
TOTALS: Stored: 32 Keys: 1 Chars on oneliner: 35 Non-stored: 0 Keysize:26 Record size: 37	
UNIT 1 CONTAINER UNIT	
CONTAINER UNIT CODE:	
UNIT DESCRIPTION: FACTOR TO CONVERT TO GALLONS:	
FACTOR TO CONVERT TO POUNDS:	
F1-HELP ESC-EXIT	

SUMMARY FOR: CODATA Application version #: 19 01/11/92 APPLICATION	30 - EMERGENCY CONTAC 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 0 0 0 0
L	COMPANY: ADDRESSI I: ADDRESSI 2: SIC CODE: DUN 6 BRAD NUMBER: OPERATOR: ADDRESSI 6: ADDRESSI 7: CITY 8: SIC CODE A: EMERGENCY CONTACT B: PHONE NUMBER B: EMERGENCY CONTACT F: PHONE NUMBER B: STATE 5: TITY CODE PROBE NUMBER B: STATE 5: STATE 6: PHONE NUMBER B: STATE 5: STATE 5: STATE 5: STATE 6: STA

SUMMARY FOR: DEPT Application version #: 7 01/11/92	CURRENTLY DEFINED REPORTS -
	REPORT FILE: DEPT.TRO REPORT NAME: MASTER
APPLICATION Master: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0	DESCRIPTION: RAW DATA
Record Security is DISABLED	ADDITIONAL APPLICATIONS ACCESSED: CODATA
APPLICATION OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display message : Y Display Page number : N	
Display time : Y Display command : Y Allow tab to home : Y Data application : Y	
Full field tab option : - Number of oneliners : 20	
Allow use of ZAP key : Y Allow use of ESC key : Y Valid database commands : FEUDPRECX	
L LPIKKDISHAAFTPNDSO E OAIETUIEATTHYNAAK N N CGIYPPICNE UTPTTTPE	
2 - R 0 01 NON 0 N 0 0 0 0 0 0 N 0 3 0 01 NON 0 N 0 0 0 0 0 0 0 N 0	
4 0 01 NON 0 N 0 0 0 0 0 0 0 N 0 5 - DEPARTHENT NUMBE 0 01 N 0 N 0 N 0 0 0 0 0 1 0 N 0 6 - R 4 51 Y 0 N 0 Y 0 0 0 8 0 1 0 N 4	
7 - DEPARTMENT 0 01 NON 0 N 0 0 0 0 0 0 0 N 0 8 - NAME: 15 91 NON 0 N 0 0 0 8 0 0 0 N 15	
9 - FI-HELP 0 01 NON 0 N 0 0 0 0 0 1 0 N 0 10 - ESC-EXIT 0 01 NON 0 N 0 0 0 0 0 1 0 N 0	
TOTALS: Stored: 19 Keys: 1 Chars on oneliner: 20 Non-stored: 0 Keysize:26 Record size: 24	
Record size: 24	
DEPT 1 DEPARTMENT MASTER	
DEPARTMENT NUMBER:	
DEPARTMENT NAME:	
F1-HELP ESC-EXIT	
	,

amaia ny Pan-	Tunt 1	lication vers	ion 1:	11			01/1	11/9	2	CURREN	TLY DEFINE	REPORTS -			 	
MARY FOR: E	MPL App										FILE: EMP				 	
CATION	Master: 1	Find: 1		nter: 3			Updat			REPORT DESCRI	NAME: MAS PTION:	TER				
SECURITY	Delete: 3 Record Security	Print: 1 is DISABLED	В	acch: 9) 		Audi	1t: () 	RAW DA		CATIONS ACCE	SSED:	CODATA		
LICATION	ternate ":" cha		Alte			araci										
Di	isplay message	: Y	Disp Disp	lay Paq lay con	ge nur	per	:	: N : Y								
7 (isplay time llow tab to home lnes to print af	tor bace: U	Item	applic to st er of c	cart o	urso	r on:	: Y : 1 : 20								
Cl Al	oll field tab op lear screen on e llow use of ZAP Valid database c	nter : N key : Y	Clea	r non-:	stored	l on l	RNF :	: N								
٧	Valid database c Other valid co	ommands: FE	UDPRBCX													
	L E	LPIKKDI OAIETUI CGIYPPI	S M E A	A A I	F T	P N N A	D A	s K	о и							
									E 							
1 - EMPLOYEE MAS 2	0	01 NON 01 NON 01 NON	0 N 0 N	0 0	0 0	0 0	0	N N	0							
4 - NUMBER 5 - LAST NAME	5 15 1	51 Y O N 01 N O N	0 Y 0 N	0 0		0 1 0 0 0 0	0	N	5 15 15							
6 - FIRST NAME 7 - HIDDLE 8 - INITIAL	0	51 NON 01 NON 01 NON	0 N 0 N	0 0	0 0	0 0	0	N N	0							
9 - DEPT 10 - 1	4 4 (15)	11 NON 51 NON 01 NON	0 N	0 0	8 0 8 0	0 0 0 8 0 1	0	N N N	4 0 0							
11 - F1-HELP 12 - ESC-EXIT	0	01 NON	о N	0 0	0 0	0 1	. 0	N	0	1						
Non-stor	red: 15 Ke	ys: 1 ysize:26		С	hars	on on	elin	er:	44	1						
Record si										1						
											312		•		 	
CHPL 1		exployee hast:	ER_										•		 	
HPL 1	1	EMPLOYEE MAST: E NUMBER:	_		-							- 1-2	-		 	
EMPL 1	EMPLOYE! LAST_NAI	E NUMBER:	_·								14				 	
KPL 1	EMPLOYE LAST_NAI FIRST_N.	E NUMBER:	_·												 	
MPL 1	EMPLOYEI LAST_NAI FIRST_N. MIDDLE	E NUMBER:	- 										-			
EMPL 1	EMPLOYEI LAST_NAI FIRST_N. MIDDLE	E NUMBER: ME: AME: INITIAL:	- 								10.7		-			
EMPL 1	EMPLOYEI LAST_NAI FIRST_N. MIDDLE	E NUMBER: ME: AME: INITIAL:	- 										-			
EMPL 1	EMPLOYEI LAST_NAI FIRST_N. MIDDLE	E NUMBER: ME: AME: INITIAL:	- 		-											
KPL 1	EMPLOYEI LAST_NAI FIRST_N. MIDDLE DEPT:	E NUMBER: ME: AME: INITIAL:	- 								14		-			
MPL 1	EMPLOYEI LAST_NAI FIRST_N. MIDDLE DEPT:	E NUMBER:	- 													
MPL 1	EMPLOYEI LAST_NAI FIRST_N. MIDDLE DEPT:	E NUMBER:	- 										-			
MPL 1	EMPLOYEI LAST_NAI FIRST_N. MIDDLE DEPT:	E NUMBER:	- 		-	-							-			
ENPL 1	EMPLOYEI LAST_NAI FIRST_N. MIDDLE DEPT:	E NUMBER:	- 	·									-			
EMPL 1	EMPLOYEI LAST_NAI FIRST_N. MIDDLE DEPT:	E NUMBER:	- 		-											
EMPL 1	EMPLOYEI LAST_NAI FIRST_N. MIODLE DEPT:	E NUMBER:	- 										-			
EMPL 1	EMPLOYEI LAST_NAI FIRST_N. MIODLE DEPT:	E NUMBER:	- 	·									-			
EMPL 1	EMPLOYEI LAST_NAI FIRST_N. MIODLE DEPT:	E NUMBER:	- 													
EMPL 1	EMPLOYEI LAST_NAI FIRST_N. MIODLE DEPT:	E NUMBER:	- 													

SUMMARY FOR: TPQ302 Application version #: 10 01/11/92	CURRENTLY DEFINED REPORTS -
APPLICATION Haster: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0 Record Security is DISABLED	REPORT FILE: TPQ302.TR1 REPORT NAME: MASTER DESCRIPTION: RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA
APPLICATION OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display message : Y Display Page number : N Display time : Y Display command : Y Allow tab to home : Y Data application : Y Lines to print after page: 0 Item# to start cursor on: 1 Full field tab option : - Number of oneliners : 20 Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Allow use of ESC key : Y Valid database commands : FEUDER Other valid commands : G	
L LPIKKDISHAAFTPNDSO E OAIETUIEATTHYNAAK N N CGIYPPICNEUTPTTPE	·
1 - SECTION 302 CREH 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 N 0 2 - ICALS - EHS'S MI 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 4 - ICALS - EHS'S MI 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 0 0 0	
TPQ302 1 SECTION 302 CHEMICALS - EHS'S MITH TPQ'S CHEMICAL ID NUMBER: CAS\$:: NAME:: TRRESHOLD PLANNING QTY - LIQ, GAS, FINE PART: (POUNDS) THRESHOLD PLANNING QTY - GENERATED SOLIDS: (POUNDS)	
F1-HELP EXIT-ESC	

SUMMARY FOR: R0304 Application version #: 11 01/11/92	CURRENTLY DEFINED REPORTS -
	REPORT FILE: R0304.TR1 REPORT NAME: MASTER
PPLICATION Master: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0	DESCRIPTION: RAW DATA
Record Security is DISABLED	ADDITIONAL APPLICATIONS ACCESSED: CODATA
PPLICATION OPTIONS Alternate ":" character : ":" Alternate "." character : "." Display message : Y Display Page number : N	
PPLICATION OPTIONS OPTIONS OPTIONS OIsplay message : Y Display Page number : N Display time : Y Display command : Y Allow tab to home : Y Data application : Y Lines to print after page : O Item# to start cursor on: 1	
Lines to print after page: 0	
Allow use of ZAP key : Y Allow use of ESC key : Y Valid database commands : FEUDPR Other valid commands : G	
VIDE 1614 COMMENT 1 9	
L LPIKKDISMAAFTPNDSO E OAIETULEATTMYNAAKN	
E ON ETULE ATT MYNAAK N N CGIYPPIC NEUT PTT TPE	
1 - SECTION 304 CHEM 0 01 NON 0 N 0 0 0 0 0 0 0 N 0 2 - ICALS - EHS'S + 0 01 NON 0 N 0 0 0 0 0 0 0 0 N 0	
3 - CERCLA WITH RO'S 0 01 NON 0 N 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
7 - CREMICAL ID NUMB 0 01 NON 0 N 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
9 - CAS\$ (8) 51 NON O NO O O 8 O O O Y O	
11 - REPORTABLE QUANT 0 01 NON 0 N 0 0 0 0 0 0 0 N 0 12 - ITY 6 11 1 N 0 N 0 Y 0 0 0 2 0 0 0 N 8	
13 - (POUNDS) 0 0 1 NON 0 N 0 0 0 0 0 0 0 N 0 14 - F1=HELP 0 01 NON 0 N 0 0 0 0 0 1 0 N 0 15 - ESC-EXIT 0 01 NON 0 N 0 0 0 0 0 1 0 N 0	
TOTALS: Stored: 12 Keys: 1 Chars on oneliner: 15 Non-stored: 88 Keysize:26	
Record size: 17	
RQ304 1 SECTION 304 CHEMICALS - EHS'S + CERCLA WITH RQ'S	

CHEMICAL ID NUMBER: CAS\$:: NAME::	
REPORTABLE QUANTITY: (POUNDS)	
F1=HELP ESC=EXIT	
	}
	}

SUMMARY FOR: TOX313 Application version #: 9 01/11/92	CURRENTLY DEFINED REPORTS -
SUMMARY FOR: TOX313 Application version #: 9 01/11/92	CONCRETE DE IND RECORTS -
	REPORT FILE: 10X313.TR1 REPORT NAME: MASTER
APPLICATION Master: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0	DESCRIPTION: RAW DATA
Record Security is DISABLED	ADDITIONAL APPLICATIONS ACCESSED: CODATA
APPLICATION OPTIONS Alternate ": character : ": Alternate ". character : "."	
Display message : Y Display Page number : N	
Allow tab to home : Y Data application : Y	
Lines to print after page: 0	
Allow use of ZAP key : Y Allow use of ESC key : Y Valid database commands : FEUDPR Other valid commands : G	
Other Asid Commences : O	
L LPIKKDIS HAAFTPNDS O E OAIETUIEATTHYNAAK N N CGIYPPIC NEUTPTTTPE	
1 - SECTION 313 TOXI 0 01 N 0 N 0 N 0 0 0 0 0 0 0 N 0 2 - C CHEMICALS 0 01 N 0 N 0 N 0 0 0 0 0 0 N 0 3	
4	
6 - ER 6 51 YON 0 Y 0 0 0 4 0 1 0 N 6 7 - CASI (8) 51 NON 0 N 0 0 0 8 0 0 0 Y 0	
8 - NAME (80) 131 NON O NO O O 8 O O 0 Y O 9 - F1-HELP O O 1 NON O NO O O O O 1 O N O	
TOTALS: Stored: 6 Keys: 1 Chars on onelinor: 6 Non-stored: 88 Keysize:26 Record size: 11	
WATCHES AND STATE OF THE STATE STATE STATE OF THE STATE O	
TOX313 1 SECTION 313 TOXIC CHEMICALS	
CHEMICAL ID NUMBER:	
CAS6::	
NAME::	
·	
F1=HELP ESC=EXIT	

SUMMARY FOR: OSHA Application version #: 8 01/11/92	CURRENTLY DEFINED REPORTS -
OCHARI EVA. Valla approved a la company de l	**
	REPORT FILE: OSHA.TRI REPORT NAME: MASTER
PLICATION Master: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0	DESCRIPTION: RAW DATA
Record Security is DISABLED	ADDITIONAL APPLICATIONS ACCESSED: CODATA
PLICATION OPTIONS Alternate ": character : ": Alternate ". character : "."	
Display message : Y Display Page number : N	
Allow tab to home : Y Data application : Y	
Full field tab option : - Number of oneliners : 20	
Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Allow use of ESC key : Y Valid database commands : FEUDPR	
Other valid commands : G	
L LPIKKDISHAAFTPNDSO	
E OAIETUIEATTHYNAAK N N CGIYPPICNEUTPTTTPE	
1 - OSHA HAZARDOUS C 0 01 N 0 N 0 N 0 0 0 0 0 0 0 N 0	
3 0 01 NON 0 N 0 0 0 0 0 N 0	
S - CHEMICAL ID NUMB 0 01 NON 0 N 0 0 0 0 1 0 N 0	
7 - CAS# (8) 51 NON O N O O O S O O Y O	
9 - F1-HELP 0 01 NON 0 N 0 0 0 0 1 0 N 0	1
OTALS: Stored: 6 Keys: 1 Chars on oneliner: 6 Non-stored: 88 Keysize:26 Record size: 11	
ROCOTO 5120: 14	
HA 1 OSHA HAZARDOUS CHEMICALS	
CREMICAL ID NUMBER:	
CAS1::	
NAME::	
· · · · · · · · · · · · · · · · · · ·	
F1-HELP ESC-EXIT	
	1

SUMMARY FOR: E2588 Application version #: 9 01/11/92	CURRENTLY DEFINED REPORTS -
	REPORT FILE: E2588.TR1
APPLICATION Haster: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0	REFORT NAME: MASTER DESCRIPTION: RAW DATA
Record Security is DISABLED	ADDITIONAL APPLICATIONS ACCESSED: COOATA
DR. 1881 - 1881 - 1881 - 1881 - 1881 - 1881 - 1881 - 1881 - 1881 - 1881 - 1881 - 1881 - 1881 - 1881 - 1881 - 1	
APPLICATION OPTIONS Alternate ":" character : "." Alternate "." character : "." Display Page number : N	
Display time : Y Display command : Y	
Lines to print after page: 0 Items to start cursor on: 1 Full field tab option : - Number of oneliners : 20 Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Allow use of ESC key : Y	
Clear screen on enter : N Clear non-stored on RNF: N Allow use of ZAP key : Y Allow use of ESC key : Y Valid database commands : FEUDPR	
L LPIXXDIS MAAFTPNDS O E OAIETUIE ATTHYN AAK N	
N CG TYPPIC NEUTPTTTPE	
1 - CALIFORNIA AB258 0 01 N 0 N 0 N 0 0 0 0 0 0 N 0 0 0 0 0	
1 0 01 NON 0 NO 0 0 0 0 0 0 N 0 0 0 0 0 0 0 0	
7 - CHEMICAL ID NUMB 0 01 N 0 N 0 0 0 0 0 0 1 0 N 0 8 - ER 6 51 Y 0 N 0 Y 0 0 0 4 0 1 0 N 6	
9 - CARCINOGENIC 1 111 NON 0 N 0 0 0 8 0 0 0 N 1 10 - (Y/N) 0 01 N 0 N 0 0 0 0 0 1 0 N 0 11 - CAS\$ (8) 51 N 0 N 0 N 0 0 0 0 0 0 0 0 0	
12 - NAME (80) 13 1 NON O N O O O 8 O O O Y O 13 - F1-HELP O O 1 NON O N O O O O O 1 O N O	
TOTALS: Stored: 7 Keys: 1 Chars on oneliner: 8	
Non-stored: 88 Keysize:26 Record size: 12	
E2588 1 CALIFORNIA AB2588 A-I CHEMICALS EMISSIONS	
CHEMICAL ID NUMBER:	
CARCINOGENIC: (Y/N)	
CAS#:: NAME::	
F1-HELP ESC-EXIT	
	•

ELICATION Master: 1 Find: 1 Enter: 3 Update: 3 Record Security 10 DISABLED Second Security 10 DISABLED	PROPRINT Print:	MMARY FOR: P2588	Application version #: 9	01/11/92	CURRENTLY DEFI
NS Alternate ": "character : ": V Display read mumber of the player of t	NS Alternate ": "character : ": V Display read mumber of the player of t	TY Delete:	1 Find: 1 Enter: 3 3 Print: 1 Batch: 9 Security is DISABLED	Update: 3	
E OA E T U E A T T H Y N A A K N N C G Y P P C N E U T T P T T T T P E C T T P T T T T P E C T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T T P T T T T T P T T T T T P T T T T T P T T T T T P T T T T T P T T T T T P T T T T T P T T T T T P T T T T T T T P T T T T T T P T	E OA E T U E A T T H Y N A A K N N C G Y P P C N E U T T P T T T T P E C T T P T T T T P E C T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T P T T T T T P T T T T T P T T T T T P T T T T T P T T T T T P T T T T T P T T T T T P T T T T T P T T T T T P T T T T T T T P T T T T T T P T	TIONS Alternate Display m Display t Allow tab Lines to Full fiel Clear scr Allow use	ime : Y Display comma- to home : Y Data applicat print after page: 0 Item# to star d tab option : - Number of ene een on enter : N Clear non-ste of ZAP kev : Y Allow use of	ind : Y ion : Y rt cursor on: 1 bliners : 20 ored on RNF : N	
2 - 8 A-II CERMICALS 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 N 0 1 - PRODUCE, USE O 0 1 N 0 N 0 N 0 0 0 0 0 0 0 N 0 1 - PRODUCE, USE O 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 1 N 0 N 0	2 - 8 A-II CHEMICALS 0 0 1 N 0 N 0 0 0 0 0 0 0 0 0 N 0 3 - 1 PRODUCE, USE 0 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 4 - R PRESENCE 0 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 5 0 0 1 N 0 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 5 0 0 1 N 0 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 7 0 0 0 1 N 0 N 0 N 0 N 0 0 0 0 0 0 0 0 N 0 8 - CHEMICAL ID NUMB 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 0 9 - CHEMICAL ID NUMB 0 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 0 10 - ER 6 5 1 Y 0 N 0 Y 0 0 0 0 1 0 N 0 N 0 11 - CARCINGGENIC 1 111 N 0 N 0 N 0 0 0 0 0 0 0 0 0 N 1 12 - (Y/N) 13 - CAS4 (8) 51 N 0 N 0 N 0 0 0 0 0 0 0 0 0 Y 0 14 - NAME (80) 131 N 0 N 0 N 0 0 0 0 0 0 0 0 Y 0 15 - FI-HELP 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 Y 0 16 - ESC-EXIT 0 0 0 1 N 0 N 0 N 0 0 0 0 0 0 0 0 0 0 TOTALS: Scored: 7 Keys: 1		E OAIETUIE ATT H	YNAAKN	
CALIFORNIA AB2588 A-II CHEMICALS PRODUCE, USE OR PRESENCE CHEMICAL ID NUMBER: CARCINOGENIC: (Y/N) CAS\$:: NAME::	CALIFORNIA AB2588 A-II CHEMICALS PRODUCE, USE OR PRESENCE CHEMICAL ID NUMBER: CARCINOGENIC: (Y/N) CAS\$:: NAME::	I PRODUCE, USE O R PRESENCE CHEHICAL ID NUMB ER CARCINOGENIC (Y/N) CAS! NAME F1-HELP ESC-EXIT LS: Stored: Non-stored:	0 01 NON 0 NO 0 0 0 0 0 0 0 0 1 NON 0 NO 0 NO	0 0 0 0 N 0 0 0 0 0 N 0 0 0 0 0 N 0 0 0 0 0	
CHEMICAL ID NUMBER: CARCINOGENIC: (Y/N) CAS\$:: NAME::	CHEMICAL ID NUMBER: CARCINOGENIC: (Y/N) CAS\$:: NAME::				
CARCINOGENIC: (Y/N) CAS\$:: NAME::	CARCINOGENIC: (Y/N) CAS\$:: NAME::	CALIFORNIA AB2		PRESENCE	
NAME::	NAME::				
· ·	· ·		·		
F1-HELP ESC-EXIT	F1-HELP ESC-EXIT				-
F1-HELP ESC-EXIT	F1-HELP ESC-EXIT	•			
			F1=HELP ESC=EXIT		
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SUMMARY FOR: CONT Application version #: 8 01/11/92	CURRENTLY DEFINED REPORTS -
MI P	
	REPORT FILE: CONT.TR1 REPORT NAME: HASTER
APPLICATION Haster: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0	DESCRIPTION: RAW DATA
Record Security is DISABLED	ADDITIONAL APPLICATIONS ACCESSED: CODATA
APPLICATION OPTIONS Alternate ":" character : ":" Alternate "." character : "."	
Display message : Y Display Page number : N Display time : Y Display command : Y	
Allow tab to home : Y para application : I Lines to print after page: 0 Item# to start cursor on: 1	
Full field tab option : - Number of oneliners : 20 Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Allow use of ESC key : Y	
Valid database commands : FEUDPR	
L LP KKD S M A A F T P N D S O	
L LPIKKDISH AAF TPN DS O E OAIETUIE ATT MYN AAK N N CGIYPPICNE UTPTTTPE	
1 CONTRACT MASTER 0 01 N 0 N 0 N 0 0 0 0 0 0 N 0	
2	
4 - NUMBER 4 51 Y ON 0 Y 0 0 0 6 0 1 0 N 4 5 - DESCRIPTION 21 91 N 0 N 0 Y 0 0 0 8 0 0 0 0 12 6 - F1-HELP 0 01 N 0 N 0 N 0 0 0 0 1 0 N 0	
7 - ESC-EXIT 0 01 NON 0 N 0 0 0 0 1 0 N 0	
TOTALS: Stored: 25 Keys: 1 Chars on oneliner: 26 Non-stored: 0 Keysize:26	
Record size: 30	
	•
CONT 1 CONTRACT MASTER	
COLLAND MALEX	
CONTRACT NUMBER:	
DESCRIPTION:	
F1-HELP ESC-EXIT	

		Application version	12	01/11/92	CURRENTLY DEFINED REPORTS -
	Haster: 1	Find: 1	Enter: 3	Update: 3	REPORT FILE: HULL.TRI REPORT NAME: MASTER DESCRIPTION:
APPLICATION SECURITY	Delete: 3	Print: 1 rity is DISABLED	Batch: 9	Audit: 0	RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA
APPLICATION OPTIONS	Display messa Display time Allow tab to Lines to prin Full field ta Clear screen Allow use of Valld databa	home : Y t after page: 0	Display rage multipliant of command Data application Items to start (Number of one); Clear non-store Allow use of ESS	mer : N : Y :ursor on: 1	
		LPIKKDIS		P N D S O	
	L E N	ON ETULE CGIYPPIC	ATTMY	N A A K N	·
1 - HULL MAS 2	TON 35	01 NON 0 01 NON 0 51 YOY 0 91 NON 0 441 NON 0 481 YON 9 01 NON 0	N 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 N 4 0 1 0 N 0 0 1 0 N 0 0 1 0 N 0	
Non-	Stored: 51 stored: 0 d size: 56	Keys: 2 Keysize:26	Chars	on oneliner: 31	
					•
AULL 1				<u>.</u>	
HULL 1		HULL MASTER			
HULL 1	HULL NUMBER: _ DESCRIPTION: _			·	
HULL 1	_	·			
HULL 1	DESCRIPTION:	·	·		
HULL 1	DESCRIPTION:	·			
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RULL 1	DESCRIPTION:	. КЕҮ:	T		

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SUMMARY FOR: SWBS Application version #: 10 01/11/92	CURRENTLY DEFINED REPORTS -
pa seri ditias print 1884 (1887 - 1887 - 1887 - 1887 - 1887 - 1887 - 1887 - 1887 - 1887 - 1887 - 1887 - 1887 -	REPORT FILE: SMBS.TRI REPORT NAME: MASTER
APPLICATION Master: 1 Find: 1 Enter: 3 Update: 3 SECURITY Delete: 3 Print: 1 Batch: 9 Audit: 0 Record Security is DISABLED	DESCRIPTION: RAW DATA
<u> </u>	ADDITIONAL APPLICATIONS ACCESSED: CODATA
APPLICATION OPTIONS Alternate ": character : ": Alternate "." character : "."	
Display message : Y Display Page number : N Display time : Y Display command : Y	
Lines to print after page: 0	
Clear screen on enter : N Clear non-stored on RNF : N Allow use of ZAP key : Y Allow use of ESC key : Y Valid database commands : FEUDPR	
L LPIKKDISHAAFTPNDSO E OAIETUIEATTHYNAAK N N CGIYPPICNEUTPTTTPE	
N	
2 - OWN STRUCTURE (S 0 01 N 0 N 0 N 0 0 0 0 0 0 0 N 0 0 0 0	
5	
8 - NUMBER 3 51 YON 0 Y 0 0 0 6 0 1 0 N 4 9 - DESCRIPTION 50 81 N 0 N 0 Y 0 0 0 8 0 0 0 N 35	
10 - FI-MELP 0 01 N 0 N 0 N 0 0 0 0 1 0 N 0 1 - ESC-EXIT 0 01 N 0 N 0 N 0 0 0 0 0 1 0 N 0	
TOTALS: Stored: 53 Keys: 1 Chars on oneliner: 40 Non-stored: 0 Keysize:26 Record sire: 58	
No 2003 NEW 2003 COMMISSION CONTRACTOR NEW 2003 TO SERVICE STORY CONTRACTOR C	
SHIF WORK BREAKDOWN STRUCTURE (SWBS) HASTER	
SWBS NUMBER:	
DESCRIPTION:	
F1-RELP ESC-EXIT	

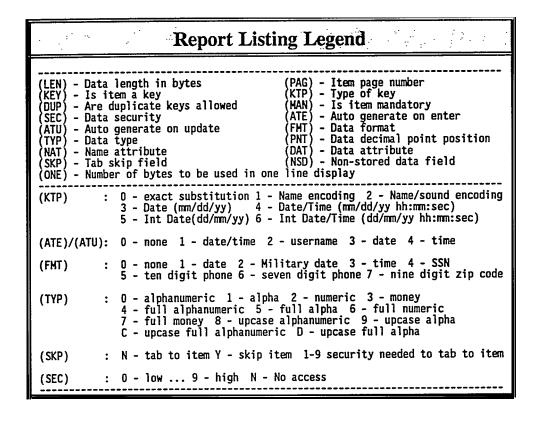
SUMMARY FOR:	COUNTS	Application version	1 #: 21	01/11/92	TOTALS: Stored: Non-stored: Record size:	67 0 72	Keys: 1 Keysize:26	Chars on oneli
PPLICATION SECURITY	Master: 7 Delete: 9 Record Se	Find: 7 Print: 7 curity is DISABLED	Enter: 9 Batch: 9	Update: 7 Audit: 0				~
, -					CURRENTLY DEFINED REPORT	RTS -		
PLICATION OPTIONS	Alternate * Display mes Display tim Allow tab t Lines to pr Full field Clear scree Allow use o	TRL: U-UPDATE :" character : ":" sage : Y e : Y o home : Y int after page: 0 tab option : - n on enter : N f ZAP key base commands : FUPR	Data applicati Item# to start Number of onel Clear non-stor Allow use of E	· v				
		L LPIKKDIS E OAIETUIE N CGIYPPIC	MAAFT ATTHY NEUTP	PNDSON AAKN				
- ID! COUN - ER - UNIQUE 1 - S - HAZARDON - T - CHEMICAI - SYNONYM - 3 - HANUFACT - 4 - PROCESS - BARCODE - HPID! - KEYDATA - FI-BELP - ESC-EXX	D NUMBER IS PRODUC	0 0 1 N 0 N 0 0 0 0 1 N 0 N 0 0 0 0 1 N 0 N 0	N 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 N 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				
	UNIQUE ID		1.					
	CREHICAL	S PRODUCT:	2:					
	CREMICAL MANUFAC	CURER:	3: 4:					
	PROCESS	·	5:					
	BARCODE	HPID#:	6:	DATA:				
		F1-HELD ESC-EX		- -				
					l l			

					_	
SUMMARY FOR:	PLANT	Application versi	on #: 9	01	/11/92	CURRENTLY DEFINED REPORTS
APPLICATION SECURITY	Haster: 1 Delete: 3 Record Se		Enter: Batch:		date: 3	REPORT FILE: PLANT.TRO REPORT NAME: HASTER DESCRIPTION: RAW DATA ADDITIONAL APPLICATIONS ACCESSED: CODATA
APPLICATION OPTIONS	Display mes Display tim Allow tab t Lines to pr Full field Clear scree Allow use o	e : Y o home : Y int after page: 0 tab option : + n on enter : N	Display F Display of Data appl Item# to Number of Clear nor Allow use	ication start cursor o	: N : Y : Y on: 1 : 20	
		L LPIKKDI E OAIETUI N CGIYPPI	S H A A E A T T C N E U	F T P N I H Y N A I T P T T	OS O AKN PPE	·
1 - PLANT OR 2 - STER 3	SITE DE	0 01 N 0 N 0 01 N 0 N 0 01 N 0 N 4 51 Y 0 N 0 01 N 0 N 0 91 N 0 N	0 N 0 0 0 Y 0 0 0 Y 0 0 0 Y 0 0 0 Y 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
Non-	Stored: 3 stored: d size: 3	O Keysize:26		Chars on onel	iner: 35	
PLANT 1		PLANT OR SITE HA	STER			
PL	PLA ANT OR SITE D	NT OR SITE:		··		

F1-RELP ESC-EXIT

Report Listings

The report listings provide detailed information for those that wish to transfer HMTS to a system other than a PC compatible environment. The report listings contain information with respect to report order, selection criteria, edit relationships and so on. All calculations made within each report are identified.



CONTA. TRO Date: 01/13/92 1 - SMV(1,1);='*' CNT BY DEPT/AREA CONTAINERS BY DEPT AND AREA - PENTER DEPT#: EQ CONTA.DEPT 3 - PENTER AREA#: Generated from data contained in: EQ CONTA.THIS_CONTAINER AREA HP CONTA CODATA Where 2 & 3 is TRUE Application Relationships Update Printed Record CODATA.KEY is found from data in SMV(1,1) -- REL TYPE - 2 HP.NUMBER is found from data in CONTA.NER -- REL TYPE - 2 AREA.NUMBER is found from data in CONTA.THIS CONTAINER -- REL TYPE - 2 DEPT.R is found from data in CONTA.DEFT -- REL TYPE - 2 No records will be updated by this report Generate security: 0 REPORT HEADER Change security: 0 Printer attribute for this block: 0
Line spacing for this block : 1
Number of lines following block : 2
Blank data lines MILL be printed
The REPORT READER will be printed at the top of every page Last user to modify this report: T Number of lines per page: 60 Number of lines to use : 60 Line length of printer : 132 Width of left margin : 0 Spacing will be used to find the top of form Row: 1 Col: 1 Field length: 25 Extracted from: CODATA.COMPANY Printer attr: 0
Print format: Left justified Attribute to initialize printer for this report: 0 Negative numbers will be printed preceded by a dash -Row: 1 Col: 59
Field length: 13
String Value [REPORT DATE:] Printer attr: 0 Print format: Left justified Any temporary sort files will be placed on TEAH-UP drive: C Destination of this report: - This report MILL be abortable. Row: 1 Col: 72 Field length: 8 Current system date Printer attr: 0 Print format: Left justified Row: 2 Col: 1 Printer attr: 0
Field length: 34 Print format: Left justified
String Value [HAZARDOUS MATERIAL TRACKING SYSTEM] Report Order Order Name Length Row: 2 Col: 63 Field length: 11 String Value [REPORT#: 61] CONTA.DEPT CONTA.THIS CONTAINER CONTA.HANGE Printer attr: 0 Print format: Left justified Row: 3 Col: 63
Field length: 1
Calculated from: %0:=%0 + 1 Total Printer attr: 12 Print format: General format This report will NOT utilize indexes. Row: 3 Col: 65 Field length: 7 String Value [PAGE#:] Printer attr: 0 Print format: Left justified Selection Criteria Records to include must match the following criteria Roy: 3 Col: 72 Printer attr: 0 Field length: 40 Print format: Left justified Extracted from: AREA.DESCRIPTION Field length: 3 Calculated from: %0 Print format: General format Row: 5 Col: 24 Printer attr: 0 Field length: 33 Print format: Left justified String Value [CONTAINERS BY DEPARTMENT AND AREA] Col: 24 Row: 2 Col: Field length: String Value [--Printer attr: 0 Print format: Left justified Row: 3 Col: Field length: String Value [CONT#] Printer attr: 0 Print format: Left justified PAGE HEADER Row: 3 Col: 14 Field length: 5 String Value [PROD#] Printer attr: 0 Print format: Left justified There are no entries defined for this block Row: 3 Col: 23
Field length: 11
String Value [DESCRIPTION] Printer attr: 0 Print format: Left justified SUB REPORT HEADER \$1 which breaks on change of CONTA.DEPT Printer attribute for this block: 6 Line spacing for this block: 1 Number of lines following block: 0 Blank data lines MILL NOT be printed This block WILL cause a page break Printer attr: 0 Print format: Left justified Row: 1 Col: 1 Field length: 6 String Value [DEPT:] Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified Row: 3 Col: 90 Field length: 4 String Value [TEMP] Printer attr: 0 Print format: Left justified Row: 1 Col: 7
Field length: 4
Extracted from: CONTA.DEPT Printer attr: 0 Print format: Left justified Row: 3 Col: 97 Field length: 7 String Value [CURRENT] Printer attr: 0 Print format: Left justified Row: 1 Col: 13 Field length: 15 Extracted from: DEPT.NAME Printer attr: 0 Print format: Loft justified Row: 3 Col: 108 Field length: 4 String Value [UNIT] Printer attr: 0 Print format: Left justified Row: 2 Col: Field length: String Value [-Printer attr: 0 Print format: Left justified Row: 3 Col: 114
Field length: 4
String Value [DATE] Printer attr: 0
Print format: Left justified Row: 3 Col: 125 Field length: 4 String Value [LAST] SUB REPORT HEADER \$2 which breaks on change of CONTA.THIS CONTAINER Printer attr: 0 Print format: Left justified Printer attribute for this block: 6 Line spacing for this block : 1 Number of lines following block: 0 Blank data lines MILL NOT be printed This block WILL NOT cause a page break Row: 4 Col: 7 Field length : String Value [TYPE] Col: 76 Printer attr: 0 Print format: Left justified Row: 4 Col: 83 Field length: 4 String Value [TYPE] Row: 1 Col: 3 Field length: 6 String Value [AREA:] Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified Row: 4 Col: 90 Field length: 4 String Value [TYPE] Row: 1 Col: 9 Printer attr: 0
Field length: 4 Print format: Left justified
Extracted from: CONTA.THIS_CONTAINER Col: 9 Printer attr: 0 Print format: Left justified Row: 1 Col: 15 Printer attr: 0 Roy: 4 Col: 97 Printer attr: 0

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Field length: 8 Print String Value [QUANTITY]	format: Left justified	Extracted from: CONTA.ENTERED Row: 1 Col: 114 Printer attr: 0
Row: 4 Col: 114 Prints Field length: 8 Print String Value (RECEIVED)	or attr: 0 format: Loft justified	Field length: 8 Print format: Left justified Extracted from: CONTALCONTAINER
Printe	er attr: 0 format: Left justified	Row: 1 Col: 125 Printer attr: 0 Field length: 8 Print format: Left justified Extracted from: CONTA.HANGE
Row: 5 Col: 5 Print Field length: 106 Print String Value [er attr: 0 : format: Left justified	PAGE SUHMARY
Pour F Col: 111 Prints	er attr: 0 format: Left justified	There are no entries defined for this block
String Value ['	REPORT SUMMARY
		There are no entries defined for this block
MAIN REPORT BODY		
Printer attribute for this block: 6 Line spacing for this block: 1 Number of lines following block: 0 Blank data lines WILL NOT be printed	1	Memory variable usage summary
This block WILL NOT cause a page bre		30 .
Row: 1 Col: 5 Print Field length: 6 Print Extracted from: CONTA.BER	er attr: 0 : format: Left justified	Roport Header \$0:=\$0 + 1 \$0
Row: 1 Col: 14 Print Field length: 6 Print Extracted from: CONTA.NER	er attr: 0 : format: Left justified	
Row: 1 Col: 23 Print Field length: 40 Print Extracted from: HP.NAME	ter attr: 0 t format: Left justified	String memory variable usage summary
Row: 1 Col: 76 Print Field length: 1 Print Extracted from: CONTA.TYPE	ter attr: 0 t format: Left justified	Selection Criteria SMV(1,1):='*'
Row: 1 Col: 83 Print Field length: 1 Print Extracted from: CONTA_TYPE	ter attr: 0 t format: Left justified	
Row: 1 Col: 90 Print Field length: 1 Print Extracted from: CONTA.URE_TYPE	ter attr: 0 t format: Left justified	
Row: 1 Col: 97 Print Field length: 8 Print Extracted from: CONTACONTAINER	ter attr: 0 t format: General format	
	ter attr: 0 t format: Left justified	

PQUA.TRO Version # 40 Date: 01/13/92	Records to include must match the following criteria
CONT HIST CONTAINER HISTORY FROM PERIOD TO PERIOD	1 - SMV(1,1):="" E0
94 8448 8888 9448 8878 9448 8878 8878 88	2 - ?ENTER DEPT#:
Generated from data contained in: PQUA CODATA HP CONTA	EQ CUNTA.DEPT 3 - TENTER AREA#:
IMPL	FOUX.ID NUMBER
Application Relationships	4 - PENTER CONTAINERS: EQ PQUA.BER
CODATA.KEY is found from data in SMV(1,1) REL TYPE = 2 RP.NUMBER is found from data in SMV(2,6) REL TYPE = 2	5 - SHV(2,6):-CONIA.BER EQ
CONTA BER is found from data in PQUA.BER REL TYPE = 2 EMPL.NUMBER is found from data in PQUA.REQUEST REL TYPE = 2	Where 2 & 3 & 4 is TRUE
Change security: 0 Generate security: 0	Update Printed Record
Last user to modify this report: T Number of lines per page: 60	No records will be updated by this report
Number of lines to use : 60 Line length of printer : 132	***************************************
Midth of left margin : 0 Spacing will be used to find the top of form	REPORT HEADER
Attribute to initialize printer for this report: 0 Negative numbers will be printed preceded by a dash -	Printer attribute for this block: 0 Line spacing for this block : 1 Number of lines following block : 2
Any temporary sort files will be placed on TEAM-UP drive: C Destination of this report: -	Blank data lines WILL be printed The REPORT HEADER will be printed at the top of every page
This report WILL be abortable.	Row: 1 Col: 1 Printer attr: 0 Field length: 25 Print format: Left justified
Report Order	Extracted from: CODATA.COMPANY Row: 1 Col: 59 Printer attr: 0
Name Length Order	Field length: 13 Print format: Left justified String Value [REPORT DATE:]
PQUA.RECEIVED 0 A PQUA.BER 6 A PQUA.RECEIVED 8 A	Row: 1 Col: 72 Printer attr: 0 Field length: 8 Print format: Left justified Current system date
Total 14 Report will use index on PQUA.RECEIVED Prompt for start key: ENTER START DATE:	Row: 2 Col: 1 Printer attr: 0 Field length: 34 Print format: Left justified String Value [HAZARDOUS MATERIAL TRACKING SYSTEM]
Prompt for stop key: ENTER STOP DATE:	Row: 2 Col: 63 Printer attr: 0 Field lengt: 11 Print format: Left justified String Value [REPORT: 62]
Selection Criteria	Row: 3 Col: 63 Printer attr: 12
Field length: 1 Print format: General format Calculated from: %0:=%0 + 1	Row: 1 Col: 124 Printer attr: 0
Row: 3 Col: 65 Printer attr: 0 Field length: 7 Print format: Left justified	Field length: 8 Print format: Left justified String Value [QUANTITY]
String Value (PAGE):)	Row: 2 Col: 1 Printer attr: 0 Field length: 4 Print format: Left justified
Row: 3 Col: 72 Printer attr: 0 Field length: 3 Print format: General format Calculated from: \$0	String Value (DATE) Row: 2 Col: 113 Printer attr: 0
Row: 5 Col: 19 Printer attr: 0 Field length: 25 Print format: Left justified	Field length: 8 Print format: Left justified String Value [LBS RCVD]
String Value (CONTAINERS HISTORY FROM:]	Row: 2 Col: 124 Printer attr: 0 Field length: 8 Print format: Left justified
Row: 5 Col: 44 Printer attr: 0 Field length: 8 Print format: Left justified Calculated from: P:19	String Value (LBS USED) Row: 3 Col: 1 Printer attr: 0
Row: 5 Col: 53 Printer attr: 0 Field length: 2 Print format: Left justified	Field length: 110 Print format: Left justified String Value [
String Value [TO] Row: 5 Col: 56 Printer attr: 0	Row: 3 Col: 111 Printer attr: 0 Field length: 22 Print format: Left justified String Value [
Field length: 8 Print format: Left justified Calculated from: P!20	
	MAIN REPORT BODY
PAGE HEADER	Printer attribute for this block: 6 Line spacing for this block : 1
Printer attribute for this block: 6 Line spacing for this block : 1 Number of lines following block : 0	Number of lines following block : 0 Blank data lines WILL NOT be printed
Blank data lines WILL NOT be printed	This block WILL NOT cause a page break Row: 1 Col: 1 Printer attr: 0
Row: 1 Col: 1 Printer attr: 0 Field length: 8 Print format: Left justified String Value [RCV/USED]	Field length: 8 Print format: Left justified Extracted from: PQUA.RECEIVED
Row: 1 Col: 11 Printer attr: 0 Field length: 5 Print format: Left justified String Value [CONT!]	Field length: 6 Print format: Left justified Extracted from: PQUA.BER
Row: 1 Col: 19 Printer attr: 0 Field length: 5 Print format: Left justified String Value [PRODI]	ROW: 1 Col: 19 Printer attr: 0 Field length: 6 Print format: Left justified Extracted from: HP.NUMBER
Row: 1 Col: 27 Printer attr: 0 Field length: 19 Print format: Left justified String Value (PRODUCT DESCRIPTION)	Row: 1 Col: 27 Printer attr: 0 Field length: 40 Print format: Left justified Extracted from: HP.NAME
Row: 1 Col: 69 Printer attr: 0 Field length: 10 Print formit: Left justified String Value [EMPL#/NAME]	Row: 1 Col: 69 Printer attr: 0 Field length: 5 Print format: General format Extracted from: PQUA.REQUEST
Row: 1 Col: 113 Printer attr: 0 Field length: 8 Print format: Left justified String Value (QUANTITY)	Row: 1 Col: 76 Printer attr: 0 Field length: 15 Print format: Left justified Extracted from: EMPL.LAST_NAME
,	

Row: 1 Col: 77 Printer att:: 0 Field length: 2 Print format: Left justified Calculated from: IF PQUA.USED<>0 THEN ', '	DODGE CHAIN
Row: 1 Col: 79 Printer attr: 0 Field length: 15 Print format: Loft justified Extracted from: EMPL.FIRST_NAME	There are no entries defined for this block
Row: 1 Col: 112 Printer attr: 0 Fleld length: 9.4 Print format: General format Extracted from: PQUA.D	~
Row: 1 Col: 123 Printer attr: 0 Field length: 9.4 Print format: General format Extracted from: FQUA.USED	Nemory variable usage summary to Report Header to:=t0 + 1 to
SUB REPORT SUMMARY #2	
Printer attribute for this block: 6 Line spacing for this block : 1 Number of lines preceding block : 0 Blank data lines MILL NOT be printed	String memory variable usage summary
Row: 1 Col: 23 Printer attr: 0 Field length: 110 Print format: Left justified String Value [Selection Criteria SMV(1,1):='2' SMV(2,6):=CONTA.BER
Row: 2 Col: 86 Printer attr: 0 Field length: 23 Print format: Left justified String Value [CURRENT CONT QTY/UNIT:]	
Row: 2 Col: 109 Printer attr: 0 Field length: 8 Print format: General format The last contents of CONTACONTAINER	
Row: 2 Col: 118 Printer attr: 0 Field length: 1 Print format: Left justified The last contents of CONTA.ENTERED	
Row: 2 Col: 121 Printer attr: 0 Field length: 10 Print format: General format The last contonts of CONTA.QTY#EQ	
Row: 2 Col: 132 Printor attr: 0 Field length: 1 Print format: Left justified String Value [P]	
Row: 3 Col: 86 Printer attr: 0 Field length: 1 Print format: Left justified String Value []	·
***************************************	·
PAGE SUMMARY	
There are no entries defined for this block	
	<u> </u>

CONTA.TRI Version # 31 Date: 01/13/92	1 - SKY(1.1):='" EQ
PROD ON HAND MSDS INVENTORY: PRODUCTS ON HAND	2 - PQUA.RECEIVED LE
Conserved draw data contributed to	7ENTER STOP DATE:
Generated from data contained in: CONTA CODATA PQUA HP	Where 2 is TRUE
40117	Update Printed Record
Application Relationships	No records will be updated by this report
CODATA.KEY is found from data in SMV(1,1) REL TYPE - 2 PQUA.BER is found from data in CONTA.BER REL TYPE - 1	
HP.NUMBER is found from data in CONTA.NER REL TYPE = 2	***************************************
	REPORT HEADER
Change security: 0 Generate security: 0 Last user to modify this report: T	Printer attribute for this block: 0 Line spacing for this block : 1 Number of lines following block : 2
Number of lines per page: 60	Blank data lines WILL be printed The REPORT HEADER will be printed at the top of every page
Number of lines to use : 60 Line length of printer : 132 Midth of left margin : 0	Row: 1 Col: 1 Printer attr: 0
Midth of loft margin : 0 Spacing will be used to find the top of form	Field length: 25 Print format: Left justified Extracted from: CODATA.COMPANY
Attribute to initialize printer for this report: 0 Negative numbers will be printed preceded by a dash - Any temporary sort files will be placed on TEAM-UP drive: C	ROW: 1 Col: 59 Printer attr: 0 Field length: 13 Print format: Left justified String Value [REPORT DATE:]
Destination of this report: - This report WILL be abortable.	Row: 1 Col: 72 Printer attr: 0 Field length: 8 Print format: Left justified Current system date
Report Order	Row: 2 Col: 1 Printer attr: 0 Field length: 34 Print format: Left justified String Value [HAZARDOUS MAYERIAL TRACKING SYSTEM]
Name Length Order CONTA.NER 6 A	Row: 2 Col: 63 Printer attr: 0 Field length: 11 Print format: Left justified String Value (REPORT: 63)
CONTALBER 6 A PQUALRECEIVED 8 A Total 20	Row: 3 Col: 63 Printer attr: 12 Field length: 1 Print format: General format Calculated from: %0:-%0 + 1
Report will use index on CONTA.NER Start/Stop prompts on index will NOT be utilized.	Row: 3 Col: 65 Printer attr: 0 Field length: 7 Print format: Left justified
Selection Criteria	String Value (PAGE#:] Row: 3 Col: 72 Printer attr: 0 Field length: 3 Print format: General format
Records to include must match the following criteria	Calculated from: %0 Row: 5 Col: 24 Printer attr: 0
	Finter act: U
Field length: 32 Print format: Left justified String Value [HSDS INVENTORY: PRODUCTS ON EAND]	Row: 3 Col: 111 Printer attr: 0 Field length: 22 Print format: Left justified String Value {
PAGE HEADER	***************************************
Printer attribute for this block: 6 Line spacing for this block : 1	SUB REPORT HEADER #1 which breaks on change of CONTA.NER
Number of lines following block : 0 Blank data lines WILL NOT be printed	Printer attribute for this block: 6 Line spacing for this block : 1
Row: 1 Col: 1 Printer attr: 0 Field length: 5 Print format: Left justified String Value (HPID#)	Number of lines following block: - Blank data lines MILL NOT be printed This block WILL NOT cause a page break
Row: 1 Col: 9 Printer attr: 0 Field length: 1 Print format: Left justified String Value [DESTIFTION]	Row: 1 Col: 1 Printer attr: 0 Field length: 6 Print format: Left justified Extracted from: CONTA.NER
Row: 1 Col: 70 Printer attr: 0 Field length: 5 Print format: Left justified String Value [CONT#]	Row: 1 Col: 9 Printer attr: 0 Field length: 40 Print format: Left justified Extracted from: HP.NAME
Row: 1 Col: 79 Printer attr: 0 Field length: 4 Print format: Left justified String Value (CONT)	MAIN REPORT BOOY
Row: 1 Col: 102 Printer attr: 0 Field length: 8 Print format: Left justified String Value (QUANTITY)	Printer attribute for this block: 6 Line spacing for this block : 1 Number of lines following block : 0
Row: 1 Col: 113 Printer attr: 0 Field length: 8 Print format: Left justified String Value (QUANTITY)	Blank data lines MILL NOT be printed This block MILL NOT cause a page break
Row: 1 Col: 129 Printer attr: 0 Field length: 4 Print format: Left justified String Value [DATE]	Fleid length: 6 Print format: Left justified Extracted from: PQUA.BER
ROW: 2 Col: 79 Printer attr: 0 Field length: 6 Print format: Left justified String Value [STATUS]	Row: 1 Col: 79 Printer attr: 0 Field length: 1 Print format: Left justified Extracted from: CONTALTYEE
Row: 2 Col: 102 Printer attr: 0 Field length: 8 Print format: Left juxtified	Row: 1 Col: 83 Printer attr: 0 Field length: 1 Print format: Left justified Extracted from: CONTATYPE
String Value [RECEIVED] Row: 2 Col: 113 Printer attr: 0 Field length: 4 Print format: Left justified	Row: 1 Col: 87 Printer attr: 0 Field length: 1 Print format: Left justified Extracted from: CONTA.URE_TYPE
String Value (USED) Row: 2 Col: 124 Printer attr: 0	Row: 1 Col: 100 Printer attr: 0 Field length: 9,4 Print format: General format Extracted from: PQUA.D
String Value (RCVD/USED) Row: 3 Col: 1 Printer attr: 0	Row: 1 Col: 111 Printer attr: 0 Field length: 9.4 Print format: General format Extracted from: PQUA.USED
Field length: 110 Print format: Left justified String Value (Row: 1 Col: 125 Printer attr: 0
	ID MO Fig. 1.

Field length: 8 Print format: Left justified Extracted from: PQUA.RECEIVED	Selection Criteria SNV(1,1):=""
SUB REPORT SUMMARY #1	
Printer attribute for this block: 6 Line spacing for this block: 1 Number of lines preceding block: 0 Blank data lines WILL NOT be printed	
Row: 1 Col: 23 Printer attr: 0 Field length: 110 Print format: Left justified String Value [
Row: 2 Col: 93 Printer attr: 0 Field length: 30 Print format: Left justified String Value [PRODUCT TOTAL POUNDS ON HAND:]	
Row: 2 Col: 123 Printer attr: 0 Field length: 10 Print format: General format Summation of values in CONTA.OTY#EQ	
Row: 3 Col: 31 Printer attr: 0 Field length: 1 Print format: Left justified String Value []	
PAGE SUMMARY	
There are no entries defined for this block	
REPORT SUMMARY	
There are no entries defined for this block	
Memory variable usage summary	
\$0 Report Header \$0:-\$0 + 1 \$0	
String memory variable usage summary	

Report will use index on POUA.RECEIVED Prompt for start key: ENTER START DATE: Prompt for stop key: ENTER STOP DATE: Date: 01/13/92 Version # 59 POUR. TRI ROUTINE VOC EMS
ROUTINE VOC EMISSIONS BY AREA AND DEPARTMENT] Selection Criteria Generated from data contained in: Records to include must match the following criteria CODATA HP CONTA 1 - SHV(1,1):='*' 2 - SMV(2,4):=CONTA.DEPT Application Relationships - SMV#(6,6):=CONTA.NER CODATA.KEY is found from data in SMV(1,1) -- REL TYPE - 2
CONTA.BER is found from data in POVA.BER -- REL TYPE - 2
DEFF.R is found from data in SMV(2,4) -- REL TYPE - 2
AREA.NUMBER is found from data in SMV(2,4) -- REL TYPE - 2
HP.NUMBER is found from data in SMV(5,6) -- REL TYPE - 2
HPC.NUMBER is found from data in POVA.NUMBER -- REL TYPE - 2
HCCAT.CATEGORY is found from data in SMV(20,4) -- REL TYPE - 2
UNIT.ODE is found from data in SMV(30,1) -- REL TYPE - 2 4 - SHV(20,4):=HPMC.ATEGORY 5 - HP.VOC#EQ 6 - SMV(30,1):='R' Change security: 0 Generate security: 0 7 - PQUA.OUNT Last user to modify this report: T Number of lines per page: 60 Number of lines to use : 60 Line length of printer : 80 Midth of left margin : 0 Where 5 & 7 is TRUE Spacing will be used to find the top of form Update Printed Record Attribute to initialize printer for this report: 0 Negative numbers will be printed preceded by a dash -No records will be updated by this report Any temporary sort files will be placed on TEAM-UP drive: C Destination of this report: - This report MILL be abortable. REPORT HEADER Printer attribute for this block: 0
Line spacing for this block : 1
Number of lines following block : 2
Blank data lines Will be printed
The REPORT HEADER will be printed at the top of every page Report Order Namo Length Order POUA.RECEIVED
POUA.NUMBER
CONTA.DEPT
POUA.ID NUMBER
POUA.RECEIVED Row: 1 Col: 1 Printer attr: 0
Field length: 25 Print format: Left justified
Extracted from: CODATA.COMPANY Row: 1 Col: 59 Field length: 13 String Value [REPORT DATE:] Printer attr: 0 Print format: Left justified Total 22 Printer attr: 0 Print format: Left justified Row: 1 Col: 7 Field length: Current system date Row: 2 Col: 1 Field length: 7 String Value [HPID#:] Printer attr: 0 Print format: Left justified Row: 2 Col: 1 Printer attr: 0 Field length: 34 Print format: Left justified String Value [HAZARDOUS MATERIAL TRACKING SYSTEM] Row: 2 Col: 8
Field length: 6
Extracted from: HP.NUMBER Printer attr: 0 Print format: Left justified Row: 2 Col: 63 Field length: 11 String Value [REPORT#: 64] Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified Field length: 12 String Value [TRADE NAME:] Row: 3 Col: 63
Field length: 1
Calculated from: %0:=%0 + 1 Printer attr: 12 Print format: General format Row: 2 Col: 28 Field length: 40 Extracted from: HP.NAME Printer attr: 0 Print format: Left justified Row: 3 Col: 65 Field length: 7 String Value [PAGE#:] Printer attr: 0 Print format: Left justified Row: 3 Col: 1 Field length: 14 String Value [VOCs LBS/GAL:] Printer attr: 0 Print format: Left justified Row: 3 Col: 7 Field length: Calculated from: 40 Row: 3 Col: 15 Field length: 9.4 Extracted from: HP.VOC_AHT Printer attr: 0 Print format: General format Row: 5 Col: 19 Printer attr: 0 Field length: 44 Print format: Left justified String Value [ROUTINE VOC EMISSIONS BY DEPARTMENT AND AREA] Row: 3 Col: 25 Printer attr: 0
Field length: 11 Print format: Left justified
Calculated from: IF HP.UNITS='G' THEN 'GRAMS/LITER' ELSE 'LBS/GAL' Row: 6 Col: 27 Field length: 6 String Value [FROH:] Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified Row: 4 Col: 1
Field length: 10
String Value [CATEGORY:] Col: Row: 6 Col: 33 Field length: 8 Calculated from: P!19 Printer attr: 0 Print format: Left justified Row: 4 Col: 11 Field length: 50 Extracted from: MCCAT.ION Printer attr: 0 Print format: Left justified Row: 6 Col: Field length : String Value [TO] Printer attr: 0 Print format: Left justified Row: 5 Col: 1 Printer attr: 0 Field length: 33 Print format: Left justified String Value (MARINE COATING RULL GRANS/LITER:) Row: 6 Col: 45 Field length: 8 Calculated from: P!20 Printer attr: 0 Print format: Left justified Row: 5 Col: 34 Field length: 4 Extracted from: MCCAT.89 Printer attr: 0 Print format: General format Row: 6 Col: Field length : String Value [-Col: Printer attr: 0 Print format: Left justified PAGE HEADER There are no entries defined for this block SUB REPORT HEADER #3 which breaks on change of CONTA.DEPT SUB REPORT HEADER #2 which breaks on change of POUA.NUMBER Printer attribute for this block: 0
Line spacing for this block : 1
Number of lines following block : 0
Blank data lines MILL NOT be printed
This block WILL NOT cause a page break Printer attribute for this block: 0 Line spacing for this block : 1 Number of lines following block : 0 Blank data lines MILL NOT be printed This block WILL cause a page break

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Row: 2 Col: 3 Printer attr: 0 Field length: 12 Print format: Left justified	Field length: 9 Print format: Left justified String Value [VOCS(LBS)]
String Value [DEPARTMENT:] Row: 2 Col: 15 Printer attr: 0 Field length: 4 Print format: Left justified Extracted from: CONTA-DEPT	Row: 5 Col: 7 Printer attr: 0 Field length: 73 Print format: Left justified String Value [
Row: 2 Col: 21 Printer attr: 0 Field length: 15 Print format: Left justified Extracted from: DEPT.NAME	MAIN REPORT BOOY
Row: 2 Col: 37 Printer attr: 12 Field length: 1 Print format: General format Calculated from: \$2:=0	Printer attribute for this block: 0 Line spacing for this block : 1 Number of lines following block : 0
Row: 3 Col: 3 Printer attr: 0 Field length: 33 Print format: Left justified String Value [Blank data lines WILL be printed This block WILL NOT cause a page break Row: 1 Col: 7 Printer attr: 0 Field length: 6 Print format: Left justified
	Extracted from: PQUA.BER Row: 1 Col: 60 Printer attr: 0
SUB REPORT HEADER #4 which breaks on change of PQUA.ID_NUMBER Printer attribute for this block: 0 Line spacing for this block : 1	Extracted from: PQUA.RECEIVED Row: 1 Col: 70 Printer attr: 0
Number of lines following block: 0 Blank data lines NILL be printed This block WILL NOT cause a page break	Field length: 9.4 Print format: General format Extracted from: PQUA.CUNT Row: 1 Col: 81 Printer attr: 12
Row: 2 Col: 5 Printer attr: 0 Field length: 6 Print format: Left justified String Value [AREA:]	Field length: 1 Print format: General format Calculated from: %1:-%1 + PQUA.OUNT
Row: 2 Col: 11 Printer attr: 0 Field length: 4 Print format: Left justified Extracted from: PQUA.ID_NUMBER	Row: 1 Col: 83 Printer attr: 12 Field length: 1 Print format: General format Calculated from: %2:=%2 + PQUA.OUNT
Row: 2 Col: 17 Printer attr: 0 Field length: 40 Print format: Left justified Extracted from: AREA.DESCRIPTION	SUB REPORT SUMMARY #3
Row: 2 Col: 59 Printer attr: 12 Field length: 1 Print format: General format Calculated from: %1:-0	Printer attribute for this block: 0 Line spacing for this block : 1 Number of lines preceding block : 1 Blank data lines WILL NOT be printed
Row: 3 Col: 5 Printer attr: 0 Field length: 52 Print format: Left justified String Value [Row: 1 Col: 38 Printer attr: 0 Field length: 32 Print format: Left justified String Value [DEPT TOTAL VOC EMISSIONS (LBS):]
Row: 4 Col: 7 Printer attr: 0 Field length: 5 Print format: Left justified String Value [CONT#]	Row: 1 Col: 70 Printer attr: 0 Field length: 10 Print format: General format Calculated from: %2
Row: 4 Col: 60 Printer attr: 0 Field length: 4 Print format: Left justified String Value [DATE]	Row: 2 Col: 36 Printer attr: 0 Field length: 34 Print format: Left justified String Value [DEPT TOTAL VOC EMISSIONS (GRAMS):]
Row: 4 Col: 71 Printer attr: 0	
Row: 2 Col: 70 Printer attr: 0 Field length: 10 Print format: General format Calculated from: \$2/UNIT.POUNDS	Memory variable usage summary 80 Report Header 80:=10 + 1
SUB REPORT SUMMARY #4	40
Printer attribute for this block: 0 Line spacing for this block : 1 Number of lines preceding block : 0 Blank data lines WILL be printed	%1 Sub-report Header #4 %1:=0 Report Body
Row: 1 Col: 38 Printer attr: 0 Field length: 42 Print format: Left justified String Value [%1:-%1 + PQUA.OUNT Sub-roport Summary %4 %1 %1/UNIT.POUNDS
Row: 2 Col: 38 Printer attr: 0 Field length: 32 Print format: Left justified String Value [AREA TOTAL VOC EMISSIONS (LBS):]	32
Row: 2 Col: 70 Printer attr: 0 Field length: 10 Print format: General format Calculated from: %1	Sub-report Header #3 %2:=0 Report Body %2:=%2 + PQUA.OUNT
Row: 3 Col: 36 Printer attr: 0 Field length: 34 Print format: Left justified String Value [AREA TOTAL VOC EMISSIONS (GRAMS):]	Sub-report Summary #3 %2 %2/UNIT.POUNDS
Row: 3 Col: 70 Printer attr: 0 Field length: 10 Print format: General format Calculated from: %1/UNIT.POUNDS	
	String memory variable usage summary Selection Criteria
PAGE SUMMARY There are no entries defined for this block	SMV(1,1):'=' SMV(2,4):-CONTA.DEPT SMV#(6,6):-CONTA.NER SMV(20,4):-EMPIC.ATEGORY
REPORT SUHHARY	SMV(30,1):='R' Report Summary SMV(20,4):='':SMV(30,1):=''
Printer attribute for this block: 0 Line spacing for this block : 1 Number of lines preceding block : 0 Blank data lines WILL be printed	
Row: 1 Col: 1 Printer attr: 12 Field length: 1 Print format: Loft justified Calculated from: SMV(20,4):='':SMV(30,1):=''	

Default value for stop key: START HPCHEM.TR2 Version # 121 Date: 01/15/92 TIER II REPORT (MAKES USE OF TIER II SUBTTL REPORT) Selection Criteria Records to include must match the following criteria Generated from data contained in: 1 - SMV! (201.8) HPCHEM CREM POUA.RECEIVED
2 - SHV! (209,8)
GE
POUA.RECEIVED
3 - SHV (100,1):='*' Application Relationships PQUA.NUMBER is found from data in RPCHEM.NUMBER -- REL TYPE = 0 CODATA.KEY is found from data in SMV(100.1) -- REL TYPE = 2 CHEM.ER is found from data in RPCHEM.ER -- REL TYPE = 2 CONTA.MER is found from data in HPCHEM.NUMBER -- REL TYPE = 0 AREA.NUMBER is found from data in SMV(101.4) -- REL TYPE = 2 TP0302.KR is found from data in RPCHEM.ER -- REL TYPE = 2 HP.NUMBER is found from data in HPCHEM.NUMBER -- REL TYPE = 2 REL TYPE = 0 4 - SHV! (101, 4) :-CONTA.THIS_CONTAINER 5 - PQUA.PLANT EQ SMV(300,4) Where 1 & 2 & 5 is TRUE Change security: 0 Generate security: 0 Last user to modify this report: T Undate Printed Record Number of lines per page: 60 Number of lines to use : 60 Line length of printer : 132 Midth of left margin : 0 Spacing will be used to find the top of form No records will be updated by this report Attribute to initialize printer for this report: 0 Negative numbers will be printed preceded by a dash -REPORT HEADER Printer attribute for this block: 0 Line spacing for this block : 1 Number of lines following block : 2 Blank data lines MITAL be printed The REPORT HEADER will be printed on the FIRST page only Any temporary sort files will be placed on TEAH-UP drive: C Destination of this report: P This report WILL be abortable. Row: 1 Col: 1 Printer attr: 0
Field length: 53 Print format: Left justified
String Value [TIER TMO - EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY] Report Order Row: 1 Col: 60 Field length: 13 String Value [REPORT DATE:] Name Length Order Printer attr: 0 Print format: Left justified HPCHEM.ER CONTA. TYPE
CONTA. TYPE
CONTA. TYPE
CONTA. TYPE
CONTA. THIS_CONTAINER Row: 1 Col: 73 Field length: 8 Current system date Printer attr: 0 Print format: Left justified Row: 2 Col: 1 Printer attr: 0
Field length: 32 Print format: Left justified
String Value [SPECIFIC INFORMATION BY CHEMICAL] Total Report will use index on HPCHEM.ER Default value for start key: SKV!(304,6) Row: 2 Col: 64 Field length: 9 String Value [REPORT#:] Row: 10 Col: Field length: String Value [,] Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified Row: 2 Col: 73 Field length: 2 String Value [65] Row: 10 Col: 4 Field length: 2 Extracted from: CODATA.4 Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified Row: 3 Col: 1 Pri Field length: 18 Pri String Value [REPORTING PERIOD:] Row: 10 Col: Field length : String Value [] Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified Row: 3 Col: 19
Field length: 8
Calculated from: SHV(201,8) Printer attr: 0 Print format: General format Row: 10 Col: 7
Field length: 10
Extracted from: CODATA.5 Printer attr: 0 Print format: Left justified Row: 3 Col: 28 Field length: 2 String Value [TO] Row: 10 Col: 49
Field length: 15
Extracted from: CODATA.8 Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified Row: 3 Col: 31 Field length: 8 Calculated from: SMV(209,8) Row: 10 Col: Field length: String Value [,] Printer attr: 0 Print format: General format Printer attr: 0 Print format: Left justified Row: 5 Col: 1 Printer attr: 0
Field length: 23 Print format: Left justified
String Value [FACILITY IDENTIFICATION] Row: 10 Col: 52 Field length: 2 Extracted from: CODATA.9 Printer attr: 0 Print format: Left justified Row: 5 Col: 49 Printer attr: 0
Field length: 20 Print format: Left justified
String Value [OWNER IDENTIFICATION] Row: 10 Col: Field length : String Value [] Printer attr: 0 Print format: Left justified Row: 7 Col: 1 Field length: 25 Extracted from: CODATA.COMPANY Printer attr: 0 Print format: Left justified Row: 10 Col: 55 Field length: 10 Extracted from: CODATA.A Printer attr: 0 Print format: Left justified Row: 7 Col: 49 Printer attr: 0 Fleid length: 30 Print format: Left justified Extracted from: COOATA.OPERATOR Row: 12 Col: 1 Field length: 10 String Value [SIC CODE:] Printer attr: 0 Print format: Left justified Row: 8 Col: 1
Field length : 20
Extracted from: COOATA.1 Printer attr: 0 Print format: Left justified Row: 12 Col: 11 Field length: 4 Extracted from: CODATA.CODE Printer attr: 0 Print format: Left justified Row: 8 Col: 49
Field length: 20
Extracted from: CODATA.6 Row: 12 Col: 17 Printer attr: 0 Field length: 19 Print format: Left justified String Value [DUN & BRAD NUMBER:] Printer attr: 0 Print format: Left justified Row: 9 Col: 1 Field length: 20 Extracted from: CODATA.2 Row: 12 Col: 36 Field length: 11 Extracted from: CODATA.R Printer attr: 0 Print format: Left justified Printer attr: 0
Print format: Left justified Row: 9 Col: 49 Field length: 20 Extracted from: CODATA.7 Row: 14 Col: 1 Pr Field length: 17 Pr String Value [EMERGENCY CONTACT] Printer attr: 0 Print format: Left justified Printer attr: 0
Print format: Left justified Row: 10 Col: 1 Field length: 15 Extracted from: CODATA.3 Row: 16 Col: 1 Field length: 23 Extracted from: CODATA.B Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified

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Row: 16 Col: 26 Printer attr: 0 Field length: 15 Print format: Left justified Extracted from: CODATA.C	Row: 2 Col: 1 Printer attr: 0 Field length: 20 Print format: Left justified String Value [CHENICAL DESCRIPTION]
Row: 16 Col: 43 Printer attr: 0 Field length: 12 Print format: Left justified Extracted from: CODATALD	Row: 2 Col: 24 Printer attr: 0 Field length: 14 Print format: Left justified String Value [TRADE SECRET:]
Row: 16 Col: 57 Printer attr: 0 Fleid longth: 6 Print format: Left justified String Value [24HR:]	Row: 2 Col: 38 Printer attr: 0 Field length: 1 Print format: Left justified Extracted from: HP.SECRET
Row: 16 Col: 63 Printer attr: 0 Floid length : 12 Print format: Left justified Extracted from: CODATA-E	Row: 3 Col: 1 Printer attr: 0 Field length: 6 Print format: Left justified String Value [CAS#:]
Row: 18 Col: 1 Printer attr: 0 Field length: 23 Print format: Left justified Extracted from: COMTA.F	Row: 3 Col: 7 Printer attr: 0 Field length: 9 Print format: Left justified Extracted from: CHEM.NUMBER
Row: 18 Col: 26 Printer attr: 0 Field length: 15 Print format: Left justified Extracted from: CODATA-G	Row: 3 Col: 18 Printer attr: 0 Field length: 15 Print format: Left justified
Row: 18 Col: 43 Printer attr: 0 Field length: 12 Print format: Left justified Extracted from: CODATA-R	String Value [CHEMICAL NAME:] Row: 3 Col: 33 Printer attr: 0 Field length: 80 Print format: Left justified
Row: 18 Col: 57 Printer attr: 0 Field length: 6. Print format: Left justified String Value [24ER:]	Extracted from: CHEM.NAME Row: 4 Col: 1 Printer attr: 0 Field length: 5 Print format: Left justified
Row: 18 Col: 63 Printer attr: 0 Field length: 12 Print format: Left justified Extracted from: COOATA.I	String Value [FURE:] Row: 4 Col: 7 Printer attr: 0 Fleid length: 1 Calculated from: IF -NULL(CHEM.FURE) THEM 'X'
Row: 20 Col: 1 Printer attr: 0 Field length: 18 Print format: Left justified String Value [PLANT OR SITE ID:]	Row: 4 Col: 10 Printer attr: 0 Fleid length: 4 Print format: Left justified String Value (Mix:)
Row: 20 Col: 19 Printer attr: 0 Field length: 4 Print format: Left justicled Extracted from: POUA.PLANT	Row: 4 Col: 15 Printer attr: 0 Field length: 1 Print format: Left justified Calculated from: IF -NULL(CHEM.MIX) THEN 'X'
	Row: 4 Col: 18 Printer attr: 0 Field length: 7 Print format: Left justified
PAGE HEADER There are no entries defined for this block	String Value [SOLID:] Row: 4 Col: 25 Printer attr: 0 Field length: 1 Print format: Left justified
SUB REPORT HEADER #1 which breaks on change of HPCHEM.ER	Calculated from: IF -NULL(CHEM.SOLID) THEN 'X' Row: 4 Col: 28 Printer attr: 0 Field length: 8 Print format: Left justified
Printor attribute for this block: 6 Line spacing for this block : 1 Number of lines following block : - Blank data lines MILL NOT be printed This block NILL NOT cause a page break	String Value [LIQUID:] Row: 4 Col: 36 Printer attr: 0 Fleid length: 1 Print format: Left justified Calculated from: IF -NULL(CHEM.LIQUID) TERM 'X'
Row: 4 Col: 39 Printer attr: 0 Field length: 5 Print format: Left justified String Value [GAS:] Row: 4 Col: 44 Printer attr: 0 Field length: 1 Print format: Left justified Calculated from: IF -NULL(CHEM.GAS) THEN 'X'	Row: 11 Col: 19 Printer attr: 0 Field length: 8.1 Print format: General format Extracted from: CREM.MAXLON Row: 11 Col: 29 Printer attr: 0 Field length: 19 Print format: Left justified String Value (AVG. DAILY AMOUNT:)
String Value [GAS:] Row: 4 Col: 44 Printer attr: 0 Field length: 1 Print format: Left justified Calculated from: IF -NULL(CHEM.GAS) THEN 'X' Row: 6 Col: 1 Printer attr: 0 Field length: 27 Print format: Left justified String Value [PHYSICAL AND HEALTH HAZARDS]	Row: 11 Col: 29 Printer attr: 0 Field length: 19 Print format: Left justified String Value (AVG. DAILY AMOUNT:) Row: 11 Col: 48 Printer attr: 0 Field length: 8.1 Print format: General format Extracted from: CHEM.HAXAVGLOW
String Value [GAS:] Row: 4 Col: 44 Printer attr: 0 Field length: 1 Print format: Left justified Calculated from: IF -NULL(CHEM.GAS) THEN 'X' Row: 6 Col: 1 Print format: 0 Field length: 27 Print format: Left justified	Row: 11 Col: 29 Printer attr: 0 Field length: 19 Print format: Left justified String Value (AVG. DAILY AMOUNT:) Row: 11 Col: 48 Printer attr: 0 Field length: 8.1 Print format: General format Extracted from: CHEM.HAXAVGLOW Row: 11 Col: 58 Printer attr: 0 Field length: 18 Print format: Left justified String Value (NO. DAYS ON-SITE:)
String Value [GAS:] Row: 4 Col: 44 Printer attr: 0 Field length: 1 Print format: Left justified Calculated from: IF -NULL(CREM.GAS) THEN 'X' Row: 6 Col: 1 Print format: Left justified String Value [PHYSICAL AND HEALTH HAZARDS] Row: 7 Col: 1 Printer attr: 0	Row: 11 Col: 29 Printer attr: 0 Fleid length: 19 Print format: Left justified String Value (AVG. DAILY AMOUNT:) Row: 11 Col: 48 Printer attr: 0 Fleid length: 8.1 Print format: General format Extracted from: CHEM.HAXAVGLOW Row: 11 Col: 58 Printer attr: 0 Fleid length: 18 Print format: Left justified
String Value [GAS:] Row: 4 Col: 44 Printer attr: 0 Field length: 1 Print format: Left justified Calculated from: IF -NULL(CHEM.GAS) THEN 'X' Row: 6 Col: 1 Print format: Left justified String Value [PHYSICAL AND HEALTH HAZARDS] Row: 7 Col: 1 Printer attr: 0 Field length: 6 Print format: Left justified String Value [FIRE:]	Row: 11 Col: 29 Printer attr: 0 Field length: 19 Print format: Left justified String Value (AVG. DAILY AMOUNT:) Row: 11 Col: 48 Printer attr: 0 Field length: 8.1 Print format: General format Extracted from: CHEM.HAXAVGLOW Row: 11 Col: 58 Printer attr: 0 Field length: 18 Print format: Left justified String Value (NO. DAYS ON-SITE:)
String Value [GAS:] Row: 4 Col: 44	Row: 11 Col: 29 Printer attr: 0 Field length: 19 Print format: Left justified String Value (AVG. DAILY AMOUNT:) Raw: 11 Col: 48 Printer attr: 0 Field length: 8.1 Print format: General format Extracted from: CHEM.MAXAVGLOW Row: 11 Col: 58 Printer attr: 0 Field length: 18 Print format: Left justified String Value (No. DAYS ON-SITE:) Row: 11 Col: 76 Printer attr: 0 Field length: 8.1 Print format: General format Extracted from: CHEM.SITE Row: 12 Col: 19 Printer attr: 0 Field length: 8.1 Printer attr: 0
String Value [GAS:] Row: 4 Col: 44	Row: 11 Col: 29 Printer attr: 0 Field length: 19 Print format: Left justified String Value (AVG. DAILY AMOUNT:) Row: 11 Col: 48 Printer attr: 0 Field length: 8.1 Print format: General format Extracted from: CHEM.MAXAVGLOW Row: 11 Col: 58 Printer attr: 0 Field length: 18 Print format: Left justified String Value (NO. DAYS ON-SITE:) Row: 11 Col: 76 Printer attr: 0 Field length: 8.1 Print format: General format Extracted from: CHEM.SITE Row: 12 Col: 19 Printer attr: 0 Field length: 8.1 Print format: General format Extracted from: CHEM.HAXHIGH Row: 12 Col: 48 Printer attr: 0 Field length: 8.1 Printer attr: 0
Row: 4 Col: 44 Printer attr: 0 Field length: 1 Calculated from: IF -NULL(CHEMGAS) THEN 'X' Row: 6 Col: 1 Print format: Left justified Frield length: 27 Print format: Left justified String Value (PHYSICAL AND HEALTH HAZARDS) Row: 7 Col: 1 Printer attr: 0 Field length: 6 Print format: Left justified String Value (FIRE:) Row: 7 Col: 7 Printer attr: 0 Field length: 1 Printer attr: 0 Field length: 1 Printer format: Left justified Calculated from: IF -NULL(CHEM.FIRE_HAZARD) THEN 'X' Row: 7 Col: 10 Printer attr: 0 Field length: 24 Print format: Left justified String Value (SUDDEN REL OF FREGSURE:) Row: 7 Col: 34 Printer attr: 0 Field length: 24 Print format: Left justified String Value (SUDDEN REL OF FREGSURE:) Row: 7 Col: 34 Printer attr: 0 Field length: 1 Print format: Left justified Calculated from: IF -NULL(CHEM.PRESSURE) THEN 'X' Row: 7 Col: 37 Printer attr: 0 Field length: 1 Printer attr: 0 Field length: 12 Printer attr: 0 Frinter format: Left justified	Row: 11 Col: 29 Printer attr: 0 Field length: 19 Print format: Left justified String Value (AVG. DAILY AMOUNT:) Row: 11 Col: 48 Printer attr: 0 Field length: 8.1 Print format: General format Extracted from: CHEM.MAXAVGLOW Row: 11 Col: 58 Printer attr: 0 Field length: 18 Printer attr: 10 Field length: 18 Printer attr: 0 Field length: 8.1 Printer attr: 0
Row: 4 Col: 44 Printer attr: 0 Field length: 1 Print format: Left justified Calculated from: IF -NULL(CHEM.GAS) THEN 'X' Row: 6 Col: 1 Print format: Left justified String Value (PHYSICAL AND HEALTH HAZARDS) Row: 7 Col: 1 Printer attr: 0 Field length: 6 Print format: Left justified String Value (FIRE:) Row: 7 Col: 7 Printer attr: 0 Field length: 6 Print format: Left justified String Value (FIRE:) Row: 7 Col: 7 Printer attr: 0 Field length: 1 Printer format: Left justified Calculated from: IF -NULL(CHEM.FIRE_HAZARD) THEN 'X' Row: 7 Col: 10 Printer attr: 0 Field length: 24 Print format: Left justified String Value (SUDDEN REL OF FREGURE:) Row: 7 Col: 34 Printer format: Left justified Calculated from: IF -NULL(CHEM.PRESSURE) THEN 'X' Row: 7 Col: 37 Printer attr: 0 Field length: 1 Print format: Left justified Calculated from: IF -NULL(CHEM.PRESSURE) THEN 'X' Row: 7 Col: 37 Printer attr: 0 Field length: 12 Print format: Left justified String Value (REACTIVITY:) Row: 7 Col: 49 Printer format: Left justified Calculated from: IF -NULL(CHEM.E) THEN 'X'	Row: 11 Col: 29 Printer attr: 0 Field length: 19 Print format: Left justified String Value (AVG. DAILY AMOUNT:) Row: 11 Col: 48 Printer attr: 0 Field length: 8.1 Print format: General format Extracted from: CHEM.MAXVGLOW Row: 11 Col: 58 Printer attr: 0 Field length: 18 Print format: Left justified String Value (NO. DAYS ON-SITE:) Row: 11 Col: 76 Printer attr: 0 Field length: 8.1 Extracted from: CHEM.HAXHIGH Row: 12 Col: 48 Print format: General format Extracted from: CHEM.HAXHIGH Row: 14 Col: 1 Printer attr: 0 Field length: 8.1 Extracted from: CHEM.MAXAVGHI Row: 14 Col: 1 Printer attr: 0 Field length: 35 Print format: General format Calculated from: If (CHEM.MAXHIGH > TPO302.PART) THEN 'TPO
String Value [GAS:] Row: 4 Col: 44	Row: 11 Col: 29 Printer attr: 0 Field length: 19 Print format: Left justified String Value (AVG. DAILY AMOUNT:) Row: 11 Col: 48 Printer attr: 0 Field length: 8.1 Printer attr: 0 Field length: 8.1 Printer attr: 0 Field length: 18 Printer attr: 0 Field length: 18 Printer attr: 0 Field length: 18 Printer attr: 0 Field length: 8.1 Printer attr: 0 Field length: 15 Printer attr: 0 Field length: 5 Printer attr: 0 Field length: 35 Printer attr: 0 Field length: 35 Printer attr: 0
String Value [GAS:] Row: 4 Col: 44	Row: 11 Col: 29 Printer attr: 0 Field length: 19 Print format: Left justified String Value (AVG. DAILY AMOUNT:) Row: 11 Col: 48 Printer attr: 0 Field length: 8.1 Printer attr: 0 Field length: 18 Printer attr: 0 Field length: 8.1 Printer attr: 0 Field length: 15 Printer attr: 0 Field length: 5 Printer attr: 0 Field length: 35 Printer attr:
Row: 4 Col: 44 Printer attr: 0 Field length: 1 Field length: 27 Print format: Left justified Row: 6 Col: 1 Print format: Left justified Frield length: 27 Field length: 27 Frint format: Left justified Row: 7 Col: 1 Field length: 6 Frint format: Left justified Row: 7 Col: 7 Field length: 1 Field length: 1 Field length: 1 Field length: 1 Field length: 24 Frint format: Left justified Row: 7 Col: 34 Frinter attr: 0 Field length: 1 Frint format: Left justified Calculated from: IF -NULL(CHEM.PRESSURE) THEN 'X' Row: 7 Col: 37 Field length: 12 Frint format: Left justified String Value (REACTIVITY:) Row: 7 Col: 49 Frinter attr: 0 Field length: 1 Frint format: Left justified Calculated from: IF -NULL(CHEM.P.) THEN 'X' Row: 7 Col: 49 Frinter attr: 0 Frint format: Left justified Calculated from: IF -NULL(CHEM.P.) THEN 'X' Row: 7 Col: 52 Frinter format: Left justified String Value (RMEDIATE (ACUIE):) Row: 7 Col: 71 Frinter format: Left justified String Value (RMEDIATE (ACUIE):) Row: 7 Col: 71 Frinter attr: 0 Frinter format: Left justified Calculated from: IF -NULL(CHEM.ARD) THEN 'X' Row: 7 Col: 74 Frinter attr: 0 Frinter format: Left justified Calculated from: IF -NULL(CHEM.ARD) THEN 'X' Row: 7 Col: 74 Frinter attr: 0 Frinter format: Left justified Calculated from: IF -NULL(CHEM.ARD) THEN 'X' Row: 7 Col: 74 Frinter attr: 0 Frinter format: Left justified Calculated from: IF -NULL(CHEM.ARD) THEN 'X'	Row: 11 Col: 29 Printer attr: 0 Field length: 19 Print format: Left justified String Value (AVG. DAILY AMOUNT:) Row: 11 Col: 48 Printer attr: 0 Field length: 8.1 Printer attr: 0 Field length: 18 Printer attr: 0 Field length: 18 Printer attr: 0 Field length: 18 Printer attr: 0 Field length: 8.1 Printer attr: 0 Field length: 35 Print format: General format Extracted from: CHEM.HMXAVGHI Row: 14 Col: 1 Printer attr: 0 Field length: 35 Print format: Left justified Calculated from: TF (CHEM.HMXHIGH > TPO302.PART) (-NULL(TPO302.PART)) THEN 'TPO Row: 14 Col: 37 Printer attr: 0 Field length: 5 Printer attr: 0 Field length: 5 Printer attr: 0 Field length: 75 Printer attr: 0 Field
Row: 4 Col: 44 Printer attr: 0 Field length: 1 Calculated from: IF -NULL(CHEM.GAS) THEN 'X' Row: 6 Col: 1 Printer attr: 0 Field length: 27 Print format: Left justified Row: 7 Col: 1 Printer attr: 0 Field length: 6 Printer attr: 0 Field length: 6 Printer attr: 0 Field length: 1 Printer attr: 0 Field length: 24 Printer attr: 0 Field length: 24 Printer attr: 0 Field length: 1 Print format: Left justified String Value (SUDDEN REL OF FREGURE) Row: 7 Col: 34 Printer attr: 0 Field length: 1 Print format: Left justified Calculated from: IF -NULL(CHEM.FRESEWER) THEN 'X' Row: 7 Col: 37 Printer attr: 0 Field length: 12 Printer attr: 0 Field length: 12 Printer attr: 0 Field length: 12 Printer attr: 0 Field length: 1 Printer attr:	Row: 11 Col: 29 Printer attr: 0 Field length: 19 Print format: Left justified String Value (AVG. DAILY AMOUNT:) Row: 11 Col: 48 Printer attr: 0 Field length: 8.1 Printer attr: 0 Field length: 8.1 Printer attr: 0 Field length: 18 Printer attr: 0 Field length: 8.1 Printer attr: 0 Field length: 35 Printer attr: 0 Field length: 35 Printer attr: 0 Field length: 35 Printer attr: 0 Field length: 5 Printer attr: 0 Field length:
Row: 4 Col: 44 Printer attr: 0 rield length: 1 Calculated from: IF -NULL(CHEM.GAS) THEN 'X' Row: 6 Col: 1 Print format: Left justified Print format: Left justified Row: 7 Col: 1 Printer attr: 0 Field length: 27 Printer attr: 0 Field length: 6 Print format: Left justified Row: 7 Col: 7 Printer attr: 0 Field length: 1 Print format: Left justified String Value [FIRE:] Row: 7 Col: 7 Printer attr: 0 Field length: 1 Print format: Left justified Calculated from: IF -NULL(CHEM.FIRE_HAZARD) THEN 'X' Row: 7 Col: 10 Printer attr: 0 Field length: 24 Print format: Left justified String Value [GUDDEN REL OF FREGURE:] Row: 7 Col: 34 Printer attr: 0 Field length: 1 Print format: Left justified Calculated from: IF -NULL(CHEM.PRESSURE) THEN 'X' Row: 7 Col: 37 Printer attr: 0 Field length: 12 Print format: Left justified String Value (REACTIVITY:) Row: 7 Col: 49 Printer attr: 0 Field length: 1 Print format: Left justified Calculated from: IF -NULL(CHEM.E) THEN 'X' Row: 7 Col: 52 Printer attr: 0 Field length: 1 Print format: Left justified String Value (IMMEDIATE (ACUTE):) Row: 7 Col: 71 Printer attr: 0 Field length: 1 Print format: Left justified Calculated from: IF -NULL(CHEM.ARD) THEN 'X' Row: 7 Col: 74 Printer attr: 0 Field length: 1 Print format: Left justified String Value [GUMEDIATE (CHEM.ARD) THEN 'X' Row: 7 Col: 93 Printer attr: 0 Field length: 1 Print format: Left justified Calculated from: IF -NULL(CHEM.ARD) THEN 'X' Row: 9 Col: 1 Printer attr: 0 Frinter attr	Row: 11 Col: 29 Printer attr: 0 Field length: 19 String Value (AVG. DAILY AMOUNT:) Row: 11 Col: 48 Printer attr: 0 Field length: 8.1 Extracted from: 8.1 Extracted from: CHEM.MAXAVGLOW Row: 11 Col: 58 Printer attr: 0 Field length: 18 Printer attr: 0 Field length: 18 Printer attr: 0 Field length: 8.1 Extracted from: CHEM.STE Row: 11 Col: 76 Printer attr: 0 Field length: 8.1 Extracted from: CHEM.STE Row: 12 Col: 19 Printer attr: 0 Field length: 8.1 Extracted from: CHEM.MAXHIGH Row: 12 Col: 48 Printer attr: 0 Field length: 8.1 Extracted from: CHEM.MAXHIGH Row: 14 Col: 48 Printer attr: 0 Field length: 35 Calculated from: CHEM.MAXHIGH TRO302.PART) THEN 'TPQ Row: 14 Col: 37 Printer attr: 0 Field length: 5 Calculated from: IF (CHEM.MAXHIGH TRO302.PART) (-NULL(TPQ302.PART)) THEN 'TPQ Row: 15 Col: 1 Printer attr: 0 Field length: 35 Calculated from: IF (CHEM.MAXHIGH TRO302.PART) (-NULL(TPQ302.PART)) THEN 'TPQ E Row: 15 Col: 1 Printer attr: 0 Field length: 35 Calculated from: IF (CHEM.MAXHIGH TRO302.PART) (-NULL(TPQ302.PART)) THEN 'TPQ E Row: 15 Col: 37 Printer attr: 0 Field length: 5 Printer attr: 0 Field length: 29 Printer attr: 0

FΩ Date: 01/15/92 HPCHEM. TR3 Version # 206 2 - TENTER STOP DATE (HM/DO/YY): TIERSUBTIL1207
was changed to account for max in last chemical summary 01/15/92 12:07pm 3 - SHV# (1,8):=(DAYS(P!1)):SHV# (9,8):=DAYS(P!2) Generated from data contained in: 4 - SMV! (201,8):=P!1;SMV! (209,8):=P!2 EQ POUA HPCHEM 5 - PENTER PLANT OR SITE ID: EQ PQUA.PLANT SMV(300,4):=PI3 Application Relationships POUR NUMBER is found from data in HPCHEM.NUMBER -- REL TYPE = 0 EQ SMV!(304,6):=P!19 7 - PQUA.RECEIVED LE P!2 Change security: 0 Generate security: 0 Last user to modify this report: SUPER Where 1 & 2 & 5 & 7 is TRUE Number of lines per page: 66
Number of lines to use : 66
Line length of printer : 132
Width of loft margin : 0
Spacing will be used to find the top of form Update Printed Record No records will be updated by this report Attribute to initialize printer for this report: 0 Negative numbers will be printed preceded by a dash -Any temporary sort files will be placed on TEAM-UP drive: C Destination of this report: F C:SUBTTL.PRN This report WILL be abortable. REPORT READER There are no entries defined for this block Report Order PAGE HEADER Length Order There are no entries defined for this block Namo HPCHEM. ER PQUA.RECEIVED PQUA.D 10 SUB REPORT HEADER #1 which breaks on change of HPCHEM.ER Printer attribute for this block: 0
Line spacing for this block : 1
Number of lines following block : Blank data lines MILL NOT be printed
This block MILL NOT cause a page break 24 Total Report will use index on HPCHEM.ER Prompt for start key: ENTER CHEMICAL ID#: Default value for stop key: START Row: 1 Col: 1 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: %1:-0;%2:-0;%3:-0;%5:-0;%5:-0;%6:-0;%7:-0;%8:-0;%9:-0;%10:-0;%1 Selection Criteria Records to include must match the following criteria 1 - PENTER START DATE (MM/DD/YY): MAIN REPORT BODY Printer attribute for this block: 0 Line spacing for this block : 1 Number of lines preceding block : 0 Blank data lines NILL NOT be printed Printer attribute for this block: 0 Line spacing for this block : 1 Number of lines following block: 0 Blank data lines WILL NOT be printed This block WILL NOT cause a page break Row: 1 Col: 1 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: SMV#(25,8):=DAYS(P2) Row: 1 Col: 10 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (%25<>0) & (DAYS(PQUA.RECEIVED) <- SNV% (9,8)) THEN %1:-((%26-%27) Row: 1 Col: 2 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (\$25 <> 0) & (DAYS (PQUA.RECEIVED) <= SHV# (9,8)) THEN \$9:=(SHV# (25, Row: 1 Col: 20 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (\$25<>0) & (DAYS (PQUA.RECEIVED) <- SNV# (9,8)) THEN \$2:-{(\$26-\$27)} Row: 1 Col: 3 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (%25<>0)4(DAYS(FQUA.RECEIVED)<-SHV9(9,8)) THEN %1:-((%26-%27 Row: 1 Col: 30 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (\$25⇔0) & (DAYS (PQUA.RECEIVED) <= SMV\$ (9,8)) THEN \$3:-\$1 + \$3 Row: 1 Col: 4 Printer attr: 12 Field length: 1 Print format: General format Calculated from: IF (\$25<0)4(DAYS(PQUA.RECEIVED)<-SMV}(9,8)) THEN \$2:=((\$26-\$27 Row: 1 Col: 40 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (\$25<>0)&(DAYS(FQUA.RECEIVED)<-SMV\$(9,8)) THEN \$4:-\$2 + \$4 Row: 1 Col: 5 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (\$25 <>0) &(DAYS(\$00A.RECEIVED) <=SRV#(9,8)) THEN \$3:=\$1 + \$3 Row: 1 Col: 71 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (\$25<>0)&(DAYS(PQUA.RECEIVED)<-SHV\$(9,8)}&(\$3>\$5) THEN \$5:-\$ Row: 1 Col: 6 Printer attr: 12
Field longth: 1 Print: format: General format
Calculated from: IF (%25<0) £(DATS[FQUA.RECEXIVED) <-SHV#(3,8)) THEN %4:-%2 + %4 Row: 1 Col: 80 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (\$25<>0) & (DAYS(PQUA.RECEIVED) <= SMV\$(9,8)) & (\$4>\$6) THEN \$6:-\$ Row: 1 Col: 7 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (\$25<>0)&(DAYS(PQUA.RECEIVED)<-SMV#(9,8))&(\$3>\$5) THEN \$5:=\$ Row: 1 Col: 98
Field length: 1
Calculated from: \$26:=pqua.D 98 Printer attr: 12 Print format: General format Row: 1 Col: 8 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (%25<0)&(DAYS(PQUA.RECEIVED)<-SHV#(9,8))&(%4>%6) THEN %6:-% Row: 1 Col: 107 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: \$27:-pqua.USED Row: 1 Col: 9 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (\$25<0)&(DAYS(PQUA.RECEIVED)<-SHV#(9,8)) TREN \$7:-((SHV#(25 Row: 1 Col: 116 Field length: 1 Extracted from: HPCHEM.NUMBER Printer attr: 12 Print format: Left justified Row: 1 Col: 10 Printer attr: 12
Floid length: 1 Print format: General format
Calculated from: IF (\$25 \ightrightarrow 0) 4 (DAYS (PQUA.RECEIVED) <- SMV# (9,8)) THEN \$8:-({SMV# (25)}) Col: 122 Row: 1 Col: Field length: String Value [h] Printer attr: 12 Print format: Left justified Row: 1 Col: 12 Field length: 8 Calculated from: \$5 Printer attr: 0
Print format: General format Col: 124 Row: 1 Col: Field length: Printer attr: 12 Print format: Left justified Row: 1 Col: 2 Field length : Calculated from: %6 Extracted from: HPCHEM.ER 20 Printer attr: 0 Print format: General format Row: 1 Col: Field length: String Value [c] Col: 130 Printer attr: 12 Print format: Left justified Row: 1 Col: 29
Field length: 5
Calculated from: \$10:=\$7/\$9 Printer attr: 0 Print format: General format Col: Printer attr: 0 Print format: General format Row: 1 Col: Field length: SUB REPORT SUMMARY \$1

```
Calculated from: $11:-$8/$9
                                                                                                                                                                                                                                                                                                                               Row: 1 Col: 1 Printer attr: 12
Field length: 1 Print format: Left justified
Calculated from: SNV(1,40):-"
Row: 1 Col: 41 Printer attr: 12
Field length: 1 Print format: Left justified
Calculated from: SMV(17,16):=""
                                    Col:
                                                                                                                     Printer attr: 0
Print format: General format
Field length :
Calculated from: $9
                                                                                                                     Printer attr: 0
Print format: Left justified
                                                                                                                                                                                                                                                                                                                               Memory variable usage summary
Row: 1 Col: 45
Field length: 6
The last contents of HPCHEM.ER
                                                                                                                                                                                                                                                                                                                                     Sub-report Header #1
$1:-0;$2:-0;$3:-0;$4:-0;$5:-0;$6:-0;$7:-0;$8:-0;$9:-0;$10:-0;$11:-0;$25:-0;$
                                                                                                                                                                                                                                                                                                                                     Report Body

(1825-01) 4 (DAYS (PQUA. RECEIVED) <- SNV# (9,8)) THEN %1:-((%26-%27) *HPCREM.1)/1

IF (%25-01) 4 (DAYS (PQUA. RECEIVED) <- SNV# (9,8)) THEN %3:-%1 + %3
           SUB REPORT SUMMARY #2
                                                                                                                                                                                                                                                                                                                                             IF ($25 00) & UNITS PROVINCE AND A STATE OF THE STIFF ($26-$27) * HPCREM.1)/1
IF ($25 00) & (DAYS (PQUA.RECEIVED) <- SMV# (9,8)) THEN $1:- (($26-$27) * HPCREM.1)/1
IF ($25 00) & (DAYS (PQUA.RECEIVED) <- SMV# (9,8)) THEN $3:- $1 + $3
Printer attribute for this block: 0
Line spacing for this block : 1
Number of lines preceding block : --
Blank data lines MILL NOT be printed
Row: 1 Col: 3 Printer attr: 12
Field length: 1 Fint format: General format
Calculated from: IF (%25<>0)4(DAYS(POUA.RECEIVED)<-SMV#(9,8)) THEN %9:-((DAYS(PO
                                                                                                                                                                                                                                                                                                                                   2
Sub-report Beader $1
$1:-0;$2:-0;$3:-0;$4:-0;$5:-0;$6:-0;$7:-0;$8:-0;$9:-0;$10:-0;$11:-0;$25:-0;$
Report Body
IF ($25<0)&[DAYS(PQUA.RECEIVED)<-SHV${9,8}) THEN $2:-(($26-$27)*HPCHEM.2)/1
IF ($25<0)&[DAYS(PQUA.RECEIVED)<-SHV${9,8}) THEN $4:-$2 + $4
Sub-report Summarty $1
IF ($25<0)&[DAYS(PQUA.RECEIVED)<-SHV${9,8}) THEN $4:-$2 + $4
IF ($25<0)&[DAYS(PQUA.RECEIVED)<-SHV${9,8}) THEN $2:-(($26-$27)*HPCHEM.2)/1
IF ($25<0)&[DAYS(PQUA.RECEIVED)<-SHV${9,8}) THEN $4:-$2 + $4
Row: 1 Col: 20 Printer attr: 12 Field length: 1 First format: General format Calculated from: IF (%25<>0)4(DAYS(PQUA.RECEIVED)<-SNVP(9,8)) THEN %7:-(([DAYS(P
Row: 1 Col: 30 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (%25<>0) & (DAYS(POUA.RECEIVED) <- SMV# (9,8)) THEN %8:-(([DAYS(P
                                                                                                                                                                                                                                                                                                                            $3
Sub-report Header $1
$1:-0;$2:-0;$3:=0;$4:+0;$5:-0;$6:-0;$7:-0;$8:-0;$9:-0;$10:-0;$11:-0;$25:-0;$
Report Bedy
IF ($25<-0)&(DAYS(PQUA.RECZIVED)<-SHV$(9,8)) THEN $3:-$1 + $3
IF ($25<-0)&(DAYS(PQUA.RECZIVED)<-SHV$(9,8))&($3>$5) THEN $5:-$3 ELSE $5
Sub-report Summary $2
Sub-report Summary $2
Row: 1 Col: 50
Field length: 1
Calculated from: $25:-1
                                                                                                                     Printer attr: 12
Print format: General format
Row: 1 Col: 60 Printer attr: 12
Fleld length: 1 Print format: General format
Calculated from: SNV#(17,8):=DAYS(PQUA.RECEIVED)
                                                                                                                                                                                                                                                                                                                                     Sub-report Summary #2
IF (#2500) & (DAYS (PQUA, RECEIVED) <-SMV# (9,8)) THEN %7:-(((DAYS (PQUA, RECEIVED)
                                                                                                                                                                                                                                                                                                                                    IF ($25<0) & (DAYS (PQUA.RECEIVED) <-SHY$ (9,8)) THEN $7:=\{(UALS\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\
           PAGE SUMMARY
There are no entries defined for this block
                                                                                                                                                                                                                                                                                                                             %1:-0;%2:=0;%3:-0;%4:=0;%5:=0;%6:=0;%7:=0;%8:=0;%9:=0;%10:=0;%11:=0;%25:=0;%
Report Body
IF (%25-0)&(DAYS(POUA.RECEIVED)<-SMV%(9,%)) THEN %4:=%2 + %4
IF (%25-0)&(DAYS(POUA.RECEIVED)<-SMV%(9,%))&(44-%) THEN %6:-%4 ELSE %6
Sub-report Summary %2
IF (%25-0)&(DAYS(POUA.RECEIVED)<-SMV%(9,%)) THEN %8:=((DAYS(POUA.RECEIVED)
Printer attribute for this block: 0
Line spacing for this block : 1
Number of lines praceding block : -
Blank data lines MILL NOT be printed
               IF ($25<>0)4(DAYS(FOUA.RECEIVED)<-SHV$(9,8)) THEM $4:=$2 + $4
IF ($25<>0)4(DAYS(FOUA.RECEIVED)<-SHV$(9,8))4($4>$6) THEM $6:=$4 ELSE $6
IF ($25<>0)4(DAYS(FOUA.RECEIVED)<-SHV$(3,8)) THEM $8:=((SHV$(25,8)-SHV$(17,8)
                                                                                                                                                                                                                                                                                                                                   Sub-report Header #1
%1:=0;%2:=0;%3:=0;%4:=0;%5:=0;%7:=0;%8:=0;%9:=0;%10:=0;%11:=0;%25:=0;%
$ub-report Summary #1
%10:=0;7/49
     Sub-report Header #1
%1:-0;%2:-0;%3:-0;%4:-0;%5:-0;%6:-0;%7:-0;%8:-0;%9:-0;%10:-0;%11:-0;%25:-0;%
Report Body
IF (%25<0)&(DAYS(PQUA.RECEIVED)<-SMV#(9,8))&(%3>%5) THEN %5:-%3 ELSE %5
Sub-report Summary #1
IF (%25<>0)&(DAYS(PQUA.RECEIVED)<-SMV#(9,8))&(%3>%5) THEN %5:-%3 ELSE %5
%5
                                                                                                                                                                                                                                                                                                                                  Sub-report Beader #1
%1:=0;$2:=0;$4:=0;$5:=0;$6:=0;$7:=0;$8:=0;$9:=0;$10:=0;$11:=0;$25:=0;$
Sub-report Sumary #1
%11:=88/49
   6
Sub-report Header #1
%1:-0; %2:-0; %3:-0; %4:-0; %5:-0; %6:-0; %7:-0; %8:-0; %9:-0; %10:-0; %11:-0; %25:-0; %
Report Body
IF (%25<>0) 4 (DAYS (PQUA. RECEIVED) <-SMV#(9, 8)) 4 (%4>%6) THEN %6:-%4 ELSE %6
Sub-report Summary #1
IF (%25<>0) 4 (DAYS (PQUA. RECEIVED) <-SMV#(9, 8)) 4 (%4>%6) THEN %6:-%4 ELSE %6
%6
                                                                                                                                                                                                                                                                                                                               25
Sub-report Header #1
%1:=0;%2:=0;%3:=0;%4:=0;%5:=0;%6:=0;%7:=0;%8:=0;%9:=0;%10:=0;%11:=0;%25:=0;%
Report Body
If (%25<0) & (DAYS (POUA. RECEIVED) <-SMV#(9,8)) TEN %1:=((%26-%27) **RPCHEM.1]/1
IF (%25<0) & (DAYS (POUA. RECEIVED) <-SMV#(9,8)) THEN %2:=((%26-%27) **RPCHEM.2]/1
IF (%25<0) & (DAYS (POUA. RECEIVED) <-SMV#(9,8)) THEN %2:=(%26-%27) **RPCHEM.2]/1
IF (%25<0) & (DAYS (POUA. RECEIVED) <-SMV#(9,8)) THEN %1:=%2 **%
IF (%25<0) & (DAYS (POUA. RECEIVED) <-SMV#(9,8)) & (%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)**(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)**(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)**(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)***(%3)**(%3)***(%3)**(%3)***(%3)**(%3)**(%3)**(%3)**(%3)**(%3)**(%3)**(%3)**(%3)**(%3)**(%3)**(%3)**(%3)**(%3)**(%3)**(%3)**(%3)**(%3)**(%3)**(%3)**(%3)**
    7
Sub-report Header #1
%1:-0;%2:-0;%3:-0;%5:-0;%6:-0;%7:-0;%8:-0;%9:-0;%10:-0;%11:-0;%25:-0;%
Sub-report Summary #2
IF (%25<>0) & (DAYS(PQUA.RECEIVED) <-SMV#(9,8)) THEN %7:-((DAYS(PQUA.RECEIVED) Sub-report Summary #1
IF (%25<>0) & (DAYS(PQUA.RECEIVED) <-SMV#(9,8)) THEN %7:-((SMV#(25,8)-SMV#(17,8)) %10:-%7/%9
                                                                                                                                                                                                                                                                                                                                  Sub-report Header #1
%1:-0;%2:-0;%3:-0;%4:-0;%5:-0;%5:-0;%7:-0;%8:-0;%9:-0;%10:-0;%11:-0;%25:-0;%
$\sub-report Summary #2
IF (%25<0) & (DAYS (PQUA.RECEIVED) <-SMV#(9,8)) THEN %8:-(((DAYS (PQUA.RECEIVED)
              b-report Summary $1
IF (425~0) & [DAYS (PQUA.RECEIVED) <-SMV$ (9,8)) THEN $8:-((SMV$ (25,8)-SMV$ (17,8
$11:-48/49
                                                                                                                                                                                                                                                                                                                                  Sub-report Reader #1
#1:=0;$2:=0;$3:=0;$4:=0;$5:=0;$6:=0;$7:=0;$8:=0;$9:=0;$10:=0;$11:=0;$25:=0;$
                                                                                                                                                                                                                                                                                                                                   Report Body
[1825<00] & (DAYS (PQUA. RECEIVED) <-SHV# (9,8) | THEN %1:-((%26-%27)*HPCHEM.1)/1
[1925<00] & (DAYS (PQUA. RECEIVED) <-SHV# (9,8) | THEN %2:-(%26-%27)*HPCHEM.2)/1
   9
Sub-roport Hosdor #1
%1:-0;12:-0;13:-0;24:-0;25:-0;26:-0;27:-0;28:-0;29:-0;210:-0;211:-0;225:-0;2
Sub-roport Summary #2
IF (%25<0) & (OAYS (POUA. RECEIVED) <-SMV#(9,8)} THEN %9:-((DAYS (POUA. RECEIVED))
Sub-roport Summary #1
IF (%25<0) & (OAYS (POUA. RECEIVED) <-SMV#(9,8)} THEN %9:-(SMV#(25,8) - SMV#(17, %10:-87/49)
%11:-88/49
                                                                                                                                                                                                                                                                                                                                   $26:-pqua.D

$26:-pqua.D

$Ub-report Summary #1

IF (125-00)& (DATS (FOUA.RECEIVED) <=SMV# (9,8)) THEN %1:-((%26-%27)*HFCHEH.1)/1

IF ($25-00)& (DATS (FOUA.RECEIVED) <=SMV# (9,8)) THEN %2:-((%26-%27)*HFCHEH.2)/1
```

```
Sub-report Heador #1
%1:-0:12:-0:$3:-0:$4:-0:$5:-0:$6:-0:$7:-0:$8:-0:$9:-0:$10:-0:$11:-0:$25:-0:$
%1:-0:12:-0:$3:-0:$4:-0:$5:-0:$6:-0:$7:-0:$8:-0:$9:-0:$10:-0:$11:-0:$25:-0:$
Raport Body
IF (%25<0) & (DAYS (FQUA.RECEIVED) <-SMV#(9,8)) THEN %1:-((%26-%27)*HPCHEM.1)/1
FF (%25<0) & (DAYS (FQUA.RECEIVED) <-SMV#(9,8)) THEN %2:-((%26-%27)*HPCHEM.2)/1
%27:-pqua.USED
Sub-report Summary #1
IF (%25<0) & (DAYS (FQUA.RECEIVED) <-SMV#(9,8)) THEN %1:-((%26-%27)*HPCHEM.1)/1
IF (%25<0) & (DAYS (FQUA.RECEIVED) <-SMV#(9,8)) THEN %2:-((%26-%27)*HPCHEM.1)/1
IF (%25<0) & (DAYS (FQUA.RECEIVED) <-SMV#(9,8)) THEN %2:-((%26-%27)*HPCHEM.2)/1

Report Body
IF (%25<0) & (DAYS (FQUA.RECEIVED) <-SMV#(9,8)) THEN %1:-((%26-%27)*HPCHEM.1)/1
IF (%25<0) & (DAYS (FQUA.RECEIVED) <-SMV#(9,8)) THEN %1:-((%26-%27)*HPCHEM.2)/1
IF (%25<0) & (DAYS (FQUA.RECEIVED) <-SMV#(9,8)) THEN %1:-((DAYS (FQUA.RECEIVED))
IF (%25<0) & (DAYS (FQUA.RECEIVED) <-SMV#(9,8)) THEN %2:-((DAYS (FQUA.RECEIVED))
IF (%25<0) & (DAYS (FQUA.RECEIVED) <-SMV#(9,8)) THEN %2:-((DAYS (FQUA.RECEIVED))
IF (%25<0) & (DAYS (FQUA.RECEIVED) <-SMV#(9,8)) THEN %2:-((DAYS (FQUA.RECEIVED))
IF (%25<0) & (DAYS (FQUA.RECEIVED) <-SMV#(9,8)) THEN %2:-((SMV#(25,8) - SMV#(17,8)) T
```

Records to include must match the following criteria Version # 40 Date: 01/13/92 AUDIT. TRI 1 - SMV(1.1):='*' YARD COMPARE COMPARISON OF YARD DATA VS WHAT IS IN THE SYSTEM 2 - SMV(2,6):-CONTA.NER Generated from data contained in: 3 - PENTER AUDIT DATE: CONTA INTT EQ AUDIT.DATE Where 3 is TRUE Application Relationships CODATA.XEY is found from data in SMV(1,1) -- REL TYPE - 2
CONTA.BER is found from data in AUDIT.CONTAINERS -- REL TYPE - 2
UNIT.CODE is found from data in AUDIT.UNIT -- REL TYPE - 2
HP.NUMBER is found from data in SMV(2,6) -- REL TYPE - 2
AREA.NUMBER is found from data in AUDIT.AREA -- REL TYPE - 2 Update Printed Record No records will be updated by this report Change security: 0 REPORT HEADER Printer attribute for this block: 0
Line spacing for this block : 1
Number of lines following block : 2
Blank data lines Will be printed
The REPORT HEADER will be printed at the top of every page Last user to modify this report: T Number of lines per page: 60 Number of lines to use : 60 Line length of printer : 80 Width of left margin : 0 Spacing will be used to find the top of form Row: 1 Col: 1
Field length: 25
Extracted from: CODATA.COMPANY Printer attr: 0 Print format: Left justified Attribute to initialize printer for this report: 0 Negative numbers will be printed preceded by a dash -Row: 1 Col: 59 Field length: 13 String Value [REPORT DATE:] Printer attr: 0 Print format: Left justified Any temporary sort files will be placed on TEAM-UP drive: C Destination of this report: This report MILL be abortable. Row: 1 Col: 7 Field length: Current system date Col: 72 Printer attr: 0 Print format: Left justified Row: 2 Col: 1 Printer attr: 0 Fleld length: 34 Print format: Left justified String Value [HAZARDOUS MATERIAL TRACKING SYSTEM] Report Order Namo Length Order Row: 2 Col: 63 Field length: 11 String Value [REPORT#: 66] AUDIT.CONTAINERS Printer attr: 0 Print format: Left justified Total 6 Row: 3 Col: 63
Field length: 1
Calculated from: %0:=%0 + 1 Report will use index on AUDIT.CONTAINER# Prompt for start key: ENTER CONTAINER#: Default value for stop key: START Printer attr: 12 Print format: General format Col: 65 Printer attr: 0 Print format: Left justified Field length: 7
String Value [PAGE#:] Selection Criteria Row: 3 Col: 7 Field length: Calculated from: 60 Printer attr: 0
Print format: General format String Value [DEPT] Row: 2 Col: 76 Field length: 4 String Value [DIFF] Printer attr: 0 Print format: Left justified ROW: 5 Col: 11 Printer attr: 0
Field length: 61 Print format: Left justified
String Value [COMPARISON OF YARD CONTAINERS VS EQUIVALENT SYSTEM CONTAINERS] Row: 3 Col: Field length: String Value [----Printer attr: 0 Print format: Left justified Row: 7 Col: Printer attr: 0
Print format: Left justified Field length: 12 String Value (AUDIT DATE:] Row: 7 Col: 13
Field length: 8
Extracted from: AUDIT.DATE Printer attr: 0 Print format: Left justified MAIN REPORT BODY Printer attribute for this block: 0 Line spacing for this block : 1 Numour of lines following block : 1 Blank data lines MILL NOT be printed This block WILL NOT cause a page break PAGE READER Printer attribute for this block: 0 Line spacing for this block : 1 Number of lines following block : 0 Blank data lines WILL NOT be printed Row: 1 Col: 1
Field length: 6
String Value [YARD:] Printer attr: 0 Print format: Left justified Row: 1 Col: 10 Printer attr: 0
Field length: 6 Print format: General format
Extracted from: AUDIT.CONTAINER; Row: 1 Col: 6 Field length: 10 String Value [CONTAINER#] Printer attr: 0 Print format: Left justified Row: 1 Col: 19 Field length: 4 Extracted from: AUDIT.AREA Printer attr: 0 Print format: Left justified Row: 1 Col: 19 Field length: 4 String Value (AREA) Printer attr: 0 Print format: Left justified Row: 1 Col: 27
Field length: 9.1
Extracted from: AUDIT.QUANTITY Printer attr: 0 Print format: General format Row: 1 Col: 27
Field length: 8
String Value (QUANTITY) Printer attr: 0 Print format: Left justified Row: 1 Col: 42 Field length: 1 Extracted from: AUDIT.UNIT Printer attr: 0 Print format: Left justified Row: 1 Col: 3 Field length: String Value [UNIT] Col: 39 Printer attr: 0 Print format: Left justified Row: 1 Col: 46 Printer attr: 0
Field length: 9.4 Print format: General format
Calculated from: IF NULL(UNIT.GALLONS) THEN \$5:-AUDIT.QUANTITY*UNIT.POUNDS ELSE Row: 1 Col: 49 Field length: 6 String Value [POUNDS] Printer attr: 0 Print format: Left justified Row: 2 Col: 10 Printer attr: 0
Field length: 20 Print format: Left justified
Calculated from: IF NULL(CONTA.BER) THEN 'BAD YARD CONTAINERS!' Row: 1 Col: 60 Field length: 4 String Value (HMTS) Printer attr: 0 Print format: Left justified Row: 2 Col: 19 Printer attr: 0
Field length: 15 Print format: Left justified
Calculated from: IF NULL(AREA.NUMBER) THEN 'BAD YARD AREA!' Row: 1 Col: 74 Field length: 6 String Value (POUNDS) Printer attr: 0 Print format: Left justified Row: 2 Col: 42 Printer attr: 0
Field length: 14 Print format: Left justified
Calculated from: IF NULL(UNIT.ODE) THEN 'BAD YARD UNIT!' tow: 2 Col: 48 'leld length: 7 String Value (ON HAND) 2 Col: 48 Printer attr: 0 Print format: Left justified Row: 3 Col: 1 Field length: 6 String Value [HMTS:] Printer attr: 0 Print format: Left justified Row: 2 Col: Field length: Printer attr: 0 Print format: Left justified

Row: 3 Col: 10 Printer attr: 0 Field length: 6 Print format: Left justified Extracted from: CONTA.BER	Row: 2 Col: 69 Printer attr: 0 Field length: 11.4 Print format: General format Calculated from: %8
Row: 3 Col: 19 Printer attr: 0 Field length: 4 Print format: Left justified Extracted from: CONTA.THIS_CONTAINER	Row: 5 Col: 1 Printer attr: 0 Field length: 67 Print format: Left justified String Value [NOTE: REPORT ONLY REFLECTS THOSE CONTAINERS FOUND DURING THE AUDIT
Row: 3 Col: 27 Printer attr: 0 Field length: 9.1 Print format: General format Extracted from: CONTACONTAINER	
Row: 3 Col: 42 Printer attr: 0 Field length: 1 Print format: Left justified Extracted from: CONTA.ENTERED	Hemory variable usage summary
Row: 3 Col: 46 Printer attr: 0 Field length: 9.4 Print format: General format Calculated from: &6:=CONTA.QTYFEQ	NO Report Header No:=NO + 1 NO
Row: 3 Col: 60 Printer attr: 0 Field length: 4 Print format: Left justified Extracted from: CONTA.DEPT	15
Row: 3 Col: 71 Printer attr: 0 Field length: 9.4 Print format: General format Calculated from: \$7:=\$6-\$5	Report Body IF NULL(UNIT.GALLONS) THEN %5:=AUDIT.QUANTITY*UNIT.POUNDS ELSE %5:=AUDIT.QUA %7:=%6-%5
Row: 3 Col: 81 Printer attr: 12 Field length: 1 Print format: General format Calculated from: IF %7<0 THEN %7:-%7*-1	%6 Report Body
Row: 3 Col: 83 Printer attr: 12 Field length: 1 Print format: General format Calculated from: 18:-17 + 18	\$6:-CONTA.OTYSEQ \$7:=\$6-\$5
	17 Report Body
PAGE SUMMARY There are no entries defined for this block	\$7:=46-45 IF \$7<0 TERN \$7:-\$7*-1 \$8:-\$7 + \$8
REPORT SUMMARY	\$8 Report Body \$8:=\$7 + \$8
Printer attribute for this block: 0 Line spacing for this block : 1 Number of lines praceding block : 0 Blank data lines WILL NOT be printed	Report Summary
Row: 1 Col: 41 Printer attr: 0 Field length: 39 Print format: Left justified String Value [
Row: 2 Col: 41 Printer attr: 0 Field length: 28 Print format: Left justified String Value [ABSOLUTE POUNDS DIFFERENCE:]	String memory variable usage summary Selection Criteria
SMV (1, 1):'*' SMV (2, 6):-CONTA.NER	

```
NP.
 CHEM.TR2
                                                          Version # 43
                                                                                                               Date: 01/13/92
 ADDED CHEMICALS
LOCALLY ADDED CHEMICALS
                                                                                                                                                    Where 2 is TRUE
 Generated from data contained in:
                                                                                                                                                                                                      Update Printed Record
         CUTH
                                  CODATA
                                                                                                                                                    No records will be updated by this report
                                                Anniication Relationshine
                    CODATA.KEY is found from data in SMV(1.1) -- REL TYPE - 2
                                                                                                                                                         REPORT HEADER
                                                                                                                                                    Printer attribute for this block: 0
Line spacing for this block: 1
Number of lines following block: 2
                                                 Generate security: 0
 Change security: 0
                                                                                                                                                   Number of lines following block: 4
Blank data lines WILL be printed
The REPORT HEADER will be printed at the top of every page
 Last user to modify this report: T
 Number of lines per page: 60
Number of lines to use : 60
Line length of printer : 132
Width of left margin : 0
Spacing will be used to find the top of form
                                                                                                                                                   Row: 1 Col: 1
Field length: 25
Extracted from: CODATA.COMPANY
                                                                                                                                                                                                        Printer attr: 0
Print format: Left justified
                                                                                                                                                   Row: 1 Col: 59
Field length: 13
String Value [REPORT DATE: ]
                                                                                                                                                                   Col: 59
                                                                                                                                                                                                        Printer attr: 0
Print format: Left justified
 Attribute to initialize printer for this report: 0 Negative numbers will be printed preceded by a dash -
                                                                                                                                                   Row: 1 Col: 72
Field length: 8
Current system date
 Any temporary sort files will be placed on TEAH-UP drive: C Destination of this report: - This report WILL be abortable.
                                                                                                                                                                                                        Printer attr: 0
Print format: Left justified
                                                                                                                                                   Row: 2 Col: 1 Printer attr: 0
Field length: 34 Print format: Left justified
String Value [HAZARDOUS MATERIAL TRACKING SYSTEM]
                                                                                                                                                   Row: 2 Col: 63
Field length: 11
String Value [REPORT#: 67]
                                                           Report Order
                                                                                                                                                                                                        Printer attr: 0
Print format: Left justified
                             Namo
                                                                            Length
                                                                                               Order
                                                                                                                                                   Row: 3 Col: 63
Field length: 1
Calculated from: %0:=%0 + 1
                   CHEH. ER
                                                                                                                                                                                                        Printer attr: 12
Print format: General format
                                                                    Total
Report will use index on CHEM.ER
Start/Stop prompts on index will NOT be utilized.
                                                                                                                                                    Row: 3 Col: 65
                                                                                                                                                                                                        Printer attr: 0
Print format: Left justified
                                                                                                                                                   Field length: 7
String Value [PAGE#:]
                                                                                                                                                   Row: 3 Col: 72
Field length: 3
Calculated from: %0
                                                                                                                                                                                                        Printer attr: 0
Print format: General format
                                                      Selection Criteria
 Records to include must match the following criteria
                                                                                                                                                   Row: 5 Col: 29 Printer attr: 0
Field length: 23 Print format: Left justified
String Value [LOCALLY ADDED CHEMICALS]
1 - SHV(1,1):='*'
2 - CHEM. CHEMMASTER
                                                                                                                                                   Row: 3 Col: 67 Printer attr: 0
Field length: 1 Print format: Left justified
Extracted from: CHEM.REACTIVITY
     PAGE HEADER
                                                                                                                                                   Row: 3 Col: 69
Field length: 1
Extracted from: CHEH.OTECTION
There are no entries defined for this block
                                                                                                                                                                                                       Printer attr: 0
Print format: Left justified
                                                                                                                                                   ROW: 4 Col: 1 Printer attr: 0
Field length: 49 Print format: Left justified
String Value (NFFA (HEALTH, FIRE, REACTIVITY, SPECIAL NOTICE): ]
     MAIN REPORT BODY
Printer attribute for this block: 6
Line spacing for this block : 1
Number of lines following block : 1
Blank data lines MILL NOT be printed
This block MILL NOT cause a page break
                                                                                                                                                   Row: 4 Col: 50
Field length: 1
Extracted from: CHEM.RD
                                                                                                                                                                 Col:
                                                                                                                                                                                                       Printer attr: 0
Print format: Left justified
Row: 1 Col: 1
Field length: 9
String Value (CHEM ID#:)
                                                     Printer attr: 0
Print format: Left justified
                                                                                                                                                   Row: 4 Col: 52 Printer attr: 0
Field length: 1 Print format: Left justified
Extracted from: CHEM.NFPA_FIRE_HAZARD
Row: 1 Col: 11
Field length: 6
Extracted from: CREH.ER
                                                                                                                                                   Row: 4 Col: 54 Printer attr: 0
Field length: 1 Print format: Left justified
Extracted from: CHEM.NFFA_REACTIVITY
                                                     Printer attr: 0
Print format: Left justified
Row: 1 Col: 18
Field length: 6
String Value [CAS#: ]
                                                     Printer attr: 0
Print format: Left justified
                                                                                                                                                   Row: 4 Col: 56
Field length: 1
Extracted from: CHEM.ICE
                                                                                                                                                                                                       Printer attr: 0
Print format: Left justified
Row: 1 Col: 24
Field length: 9
Extracted from: CHEH.NUMBER
                                                     Printer attr: 0
Print format: Left justified
                                                                                                                                                   Row: 5 Col:
Field length:
                                                                                                                                                   Row: 5 Col: 1 Printer attr: 0
Field length: 96 Print format: Left justified
String Value (Tier II(FIRE HAZARD, SUDDEN PRESSURE, REACTIVITY, ACUTE HEALTH. DE
Row: 1 Col: 34
Field length: 11
String Value [CHEM FORM: ]
                                                     Printer attr: 0
Print format: Left justified
                                                                                                                                                   Row: 5 Col:
Field length:
                                                                                                                                                                              97
                                                                                                                                                                                                       Printer attr: 0
Print format: Left justified
                                                                                                                                                   Extracted from: CHEH.FIRE HAZARD
Row: 1 Col: 45
Field length: 60
Extracted from: CREM.FORMULA
                                                     Printer attr: 0
Print format: Left justified
                                                                                                                                                   Row: 5 Col:
Field length:
                                                                                                                                                                              99
                                                                                                                                                                                                      Printer attr: 0
Print format: Left justified
                                                                                                                                                   Extracted from: CHEM. PRESSURE
Row: 2 Col: 1
Field length: 15
String Value [CHEMICAL NAME: ]
                                                                                                                                                   Row: 5 Col: 101
Field length: 1
Extracted from: CHEM.E
                                                      Printer attr: 0
Print format: Left justified
                                                                                                                                                                                                       Printer attr: 0
Print format: Left justified
Row: 2 Col: 16
Field length: 80
Extracted from: CHEM.NAME
                                                                                                                                                   Row: 5 Col: 103
Field length:
                                                      Printer attr: 0
Print format: Loft justified
                                                                                                                                                                                                       Printer attr: 0
Print format: Left justified
                                                                                                                                                   Extracted from: CHEM.ARD
Row: 3 Col: 1
Field length: 62
String Value [HHIS (HEALTH, FI
                                                    Printer attr: 0
Print format: Left justified
AMMABILITY, REACTIVITY, PERSONAL PROTECTION): ]
                                                                                                                                                   Row: 5 Col: 105
Field length
                                                                                                                                                                                                       Printer attr: 0
Print format: Left justified
                                                                                                                                                   Field length : 1
Extracted from: CHEH.AZARD
Row: 3 Col: 63 Printer attr: 0
Field length: 1 Print format: Left justified
Extracted from: CHEM.RMIS_HEALTH
                                                                                                                                                  Row: 6 Col: 1
Field length: 15
String Value [CURRENT STATE: ]
                                                                                                                                                                                                      Printer attr: 0
Print format: Left justified
Row: 3 Col: 65
Field length: 1
Extracted from: CHEM.Y
                                                                                                                                                  Row: 6 Col: 16
Field length: 6
String Value [PURE: ]
                                                     Printer attr: 0
Print format: Left justified
                                                                                                                                                                                                       Printer attr: 0
Print format: Left justified
```

Row: 6 Col: 22 Printer attr: 0 Field length: 1 Print format: Left justified Extracted from: CHEM.PURE	PAGE SUNDARY
Row: 6 Col: 25 Printer attr: 0 Field length: 5 Print format: Left justified String Value [MIX:]	There are no entries defined for this block
Row: 6 Col: 30 Printer attr: 0 Field length: 1 Print format: Left justified Extracted from: CHEM.MIX	REPORT SUMMARY
Row: 6 Col: 33 Printer attr: 0 Field length: 7 Print format: Left justified String Value [SOLID:]	Printor attribute for this block: 0 Line spacing for this block : 1 Number of lines preceding block : 0 Blank data lines MLL be printed
Row: 6 Col: 40 Printer attr: 0 Field length: 1 Print format: Left justified Extracted from: CHEM.SOLID	Row: 1 Col: 1 Printer attr: 12 Field length: 1 Print format: Left justified Calculated from: SMV(1,1):=''
Row: 6 Col: 43 Printer attr: 0 Field length: 8 Print format: Left justified String Value (LIQUID:)	
Row: 6 Col: 51 Printer attr: 0 Field length: 1 Print format: Left justified Extracted from: CHEM_LIQUID	Memory variable usage summary
Row: 6 Col: 54 Printer attr: 0 Field length: 5 Print format: Left justified String Value [GAS:]	\$0 Report Header \$0:=\$0 + 1 \$0
ROW: 6 Col: 59 Printer attr: 0 Floid length: 1 Print format: Left justified Extracted from: CHEM.GAS	
Row: 7 Col: 1 Printer attr: 0 Field length: 15 Print format: Left justified String Value [DEMSITY (G/CC):]	String memory variable usage summary
Row: 7 Col: 17 Printer attr: 0 Field longth: 9.4 Print format: General for Extracted from: CHEM.CC	Sqlection Criteria SNV(1.1):='*' Report Summary
Row: 7 Col: 25 Printer attr: 0 Field length: 7 Print format: Left justified String Value [VCC'S:]	SNV(1,1):='
Row: 7 Col: 32 Printer attr: 0 Field length: 1 Print format: Left justified Extracted from: CHEM.VOCS	
Row: 7 Col: 36 Printer attr: 0 Field length: 25 Print format: Left justified String Value [NON-CREMMASTER CHEMICAL:]	
Row: 7 Col: 61 Printer attr: 0 Field length: 1 Print format: Left justified Extracted from: CHEM.CHEMMASTER	

CONTA TES Version i 29 Date: 01/13/92 SHELF LIFE LISTING OF CONTAINERS THAT HAVE EXPIRED OR ARE NEARING SHELF LIFE EXPIRATION Where is TRUE Generated from data contained in: Undate Printed Record CODATA CONTA No records will be updated by this report Application Relationships COOATA.KEY is found from data in SMV(1,1) -- REL TYPE - 2 RP.NUMBER is found from data in CONTA.NER -- REL TYPE - 2 REPORT HEADER Printer attribute for this block: 0
Line spacing for this block : 1
Number of lines following block : 2
Blank data lines MILL be printed
The REPORT HEADER will be printed at the top of every page Change security: 0 Generate security: 0 Last user to modify this report: T Row: 1 Col: 1 Printer attr: 0 Field length: 25 Print format: Left justified Extracted from: CODATA.COMPANY Number of lines per page: 60 Number of lines to use : 60 Line length of printer : 132 Width of left margin : 0 Spacing will be used to find the top of form Row: 1 Col: 59 Field length: 13 String Value [REPORT DATE:] Printer attr: 0 Print format: Left justified Attribute to initialize printer for this report: 0 Negative numbers will be printed preceded by a dash -Row: 1 Col: 72 Field length: 8 Current system date Printer attr: 0 Print format: Left justified Any temporary sort files will be placed on TEAM-UP drive: C Destination of this report: - This report WILL be abortable. Row: 2 Col: 1 Printer attr: 0 Field length: 34 Print format: Left justified String Value [HAZARDOUS HATERIAL TRACKING SYSTEM] Row: 2 Col: 63 Field length: 11 String Value [REPORT#: 68] Printer attr: 0 Print format: Left justified Report Order Name Row: 3 Col: 63
Field length: 1
Calculated from: %0:=%0 + 1 Printer attr: 12 Print format: General format CONTA.BER CONTA.IRES Row: 3 Col: 65 Field length: 7 String Value [PAGE#:] Printer attr: 0 Print format: Left justified Report will use index on CONTA.BER
Prompt for start key: ENTER START CONTAINER NUMBER:
Prompt for stop key: ENTER STOP CONTAINER NUMBER: Row: 3 Col: 72 Field length: 3 Calculated from: 40 Printer attr: 0 Print format: General format Row: 5 Col: 7 Printer attr: 0 Field length: 69 Print format: Left justified String Value [CONTAINERS THAT HAVE EXPIRED OR ARE NEARING EXPIRATION WRT SHELF L Records to include must match the following criteria 1 - SHV(1,1):='*' Row: 2 Col: 101 Field length: 4 String Value [LEFT] Printer attr: 0 Print format: Left justified PAGE HEADER Printer attribute for this block: 6 Line spacing for this block : 1 Number of lines following block: 0 Blank data lines WILL NOT be printed Row: 2 Col: 110 Field length: 6 String Value [AMT IN] Printer attr: 0 Print format: Left justified Row: 1 Col: 1 Field length: 7 String Value [CNT ID#] Row: 2 Col: 127 Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified Field length: 6 String Value [POUNDS] Row: 1 Col: 10 Field length: 6 String Value [HP ID#] Row: 3 Col: 88
Field length: 4
String Value [LEFT] Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified Row: 1 Col: 18 Field length: 12 String Value [PRODUCT NAME] Row: 3 Col: 95 Field length: 4 String Value [LEFT] Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified Row: 1 Col: 81 Field length: 5 String Value (SHELF) Row: 3 Col: 112 Field length: 4 String Value (CNTR) Printer attr: 0
Print format: Left justified Printer attr: 0 Print format: Left justified Row: 1 Col: #8 Field length: 5 String Value [30-60] Row: 4 Col: Field length : String Value [--Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified Row: 1 Col: 95 Field length: 4 String Value [0-29] Row: 4 Col: Field length : String Value [--Printer attr: 0 Print format: Left justified Printer attr: 0
Print format: Left justified Row: 1 Col: 101 Field length: 4 String Value [DAYS] Row: 5 Col: 1
Field length: 6
Extracted from: CONTA.BER Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified Row: 1 Col: 109 Field length: 7 String Value [CURRENT] Row: 5 Col: 1 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (DAYS(CONTA.IRES)-DAYS(SDATE)>60) THEN EXIT Printer attr: 0 Print format: Left justified Row: 1 Col: 118 Field length: 4 String Value [UNIT] Printer attr: 0 Print format: Left justified Row: 5 Col: 10 Field length: 6 Extracted from: CONTA.NER Printer attr: 0 Print format: Left justified Row: 1 Col: 128 Field length: 5 String Value [EQUIV] Printer attr: 0 Print format: Left justified Row: 5 Col: 18 Field length: 40 Extracted from: RP.NAME Printer attr: 0 Print format: Left justified Row: 2 Col: 82 Field length: 4 String Value [LIFE] Printer attr: 0 Print format: Left justified Row: 5 Col: 78
Field length: 8
Extracted from: CONTA.IRES Printer attr: 0 Print format: Left justified Row: 2 Col: 88 Field length: 4 String Value [DAYS] Printer attr: 0 Print format: Left justified Row: 5 Col: 88 Printer attr: 0
Field length: 1 Print format: Left justified
Calculated from: IF (DAYS(CONTA.IRES)-DAYS(SDATE)<-60)4(DAYS(CONTA.IRES)-DAYS(SD Row: 2 Col: 95 Field length: 4 String Value [DAYS] Row: 5 Col: 88 Printer attr: 0
Field length: 9 Print format: Left justified
Calculated from: IF (DAYS(CONTA.IRES)-DAYS(SDATE)<-0) THEM '!EXPIRED!' Printer attr: 0 Print format: Left justified

```
Row: 1 Col: 78
Field length: 8
Extracted from: CONTA.IRES
                                                                                                                                                                                                                                                                                                           Col:
                                                                                                                                                                                                                                                                                                                                                                                Printer attr: 0
Print format: Left justified
Row: 5 Col: 95 Printer attr: 0
Field length: 1 Print format: Left justified
Calculated from: IF (DAYS(CONTA.IRES)-DAYS(SDATE)<-29)4(DAYS(CONTA.IRES)-DAYS(SD
                                                                                                                                                                                                                                                                              Row: 1 Col: 88 Printer attr: 0
Field length: 9 Print format: Left justified
Calculated from: IF (DAYS(CONTA.IRES)-DAYS(SDATE)<-0) THEN '!EXPIRED!'
                                                                                                                                                                                                                                                                                                                                        88
Row: 5 Col: 101 Printer attr: 0
Field length: 4 Print format: General format
Calculated from: DAYS(CONTA.IRES)-DAYS(SDATE)
                                                                                                                                                                                                                                                                              Row: 1 Col: 88 Printer attr: 0
Field length: 1 Print format: Left justified
Calculated from: IF (DAYS(CONTA.IRES)-DAYS(SDATE) <-60) & (DAYS(CONTA.IRES)-DAYS(SDATE) <-60) & (DAYS(CONTA.IRES)-DAYS(SDATE) <-60) & (DAYS(CONTA.IRES) -DAYS(SDATE) <-60) & (DAYS(CONTA.IRES) -DAYS(DAYS(CONTA.IRES) -DAYS(DAYS(CONTA.I
Row: 5 Col: 107 Printer attr: 0
Field length: 9.1 Print format: General format
Extracted from: CONTA._CONTAINER
                                                                                                                                                                                                                                                                              Row: 1 Col: 95 Printer attr: 0
Field length: 1 Print format: Left justified
Calculated from: IF (DAYS(CONTA.IRES)-DAYS(SDATE)<-29)&(DAYS(CONTA.IRES)-DAYS(SD
                              Col: 121
 Row: 5 Col: 121
Field length: 1
Extracted from: CONTA.ENTERED
                                                                                                   Printer attr: 0
Print format: Left justified
                                                                                                                                                                                                                                                                               Row: 1 Col: 101 Printer attr: 0
Field length: 4 Print format: General format
Calculated from: DAYS(CONTA.IRES)-DAYS(SDATE)
Row: 5 Col: 124
Field length: 9.4
Extracted from: CONTA.OTY#EQ
                            Col: 124
                                                                                                  Printer attr: 0
Print format: General format
                                                                                                                                                                                                                                                                               Row: 1 Col: 107 Printer attr: 0
Field length: 9.1 Print format: General format
Extracted from: CONTA._CONTAINER
                           Col: 139
                                                                                                  Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (DAYS(CONTA.IRES)-DAYS(SDATE) <= 60) & (DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAYS(CONTA.IRES)-DAYS(DAY
                                                                                                                                                                                                                                                                              Row: 1 Col: 121
Field length: 1
Extracted from: CONTA.ENTERED
                                                                                                                                                                                                                                                                                                                                                                               Printer attr: 0
Print format: Left justified
Row: 5 Col: 141 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (DAYS(CONTA.IRES)-DAYS(SDATE)<-29)4(DAYS(CONTA.IRES)-DAYS(SD
                                                                                                  Printer attr: 12
                                                                                                                                                                                                                                                                              Row: 1 Col: 124
Field length: 9.4
Extracted from: CONTA.QTY#EQ
                                                                                                                                                                                                                                                                                                                                                                               Printer attr: 0
Print format: General format
Row: 5 Col: 143 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (DAYS(CONTA.IRES)-DAYS(SDATE)<-0) THEN %7:-%7 + CONTA.QTY#EQ
                                                                                                                                                                                                                                                                              Row: 1 Col: 139 Printor attr: 12
Field length: 1 Print format: General format
Calculated from: IF (DAYS(CONTA.IRES)-DAYS(SDATE)<-60)4(DAYS(CONTA.IRES)-DAYS(SD
                                                                                                                                                                                                                                                                              Row: 1 Col: 141 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (DAYS(CONTA.IRES)-DAYS(SDATE)<-29)&(DAYS(CONTA.IRES)-DAYS(SD
          MAIN REPORT BODY
Printer attribute for this block: 6
Line spacing for this block : 1
Number of lines following block: 0
Blank data lines WILL NOT book printed
This block WILL NOT cause a page break
                                                                                                                                                                                                                                                                               Row: 1 Col: 143 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (DAYS(CONTA.IRES)-DAYS(SDAE)<-0) THEM %7:-%7 + CONTA.OTYSEO
Row: 1 Col: 1 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF (DAYS(CONTA.IRES)-DAYS(SDATE)>60) THEN EXIT
                                                                                                                                                                                                                                                                                       PAGE SUMMARY
                                                                                                  Printer attr: 0
Print format: Left justified
 Row: 1 Col: 1
Field length: 6
Extracted from: CONTA.BER
                              Col: 1
                                                                                                                                                                                                                                                                              There are no entries defined for this block
                                                                                                   Printer attr: 0
Print format: Left justified
                              Col: 10
  Row: 1 Col:
Field length:
                                                                                                                                                                                                                                                                                        REPORT SUMMARY
 Extracted from: CONTA.NER
                                                                                                                                                                                                                                                                              Printer attribute for this block: 6
Line spacing for this block : 1
Number of lines praceding block : 0
Blank data lines MILL NOT be printed
                              Col: 18
                                                                                                   Printer attr: 0
Print format: Left justified
 Row: 1 Col: 18
Field length: 40
Extracted from: HP.NAME
                                                                                                                                                                                                                                                                                     Report Body
IF (DAYS(CONTA.IRES)-DAYS(SDATE) <-29) & (DAYS(CONTA.IRES)-DAYS(SDATE)>0) THEN Report Summary
%6
 Row: 1 Col:
Field length :
String Value [-
                                                                                                    Printer attr: 0
Print format: Left justified
                                                          110
 Row: 1 Col:
Field length:
                                                                                                    Printer attr: 0
Print format: Left justified
  String Value [
                                                                                                                                                                                                                                                                                   7
Page Header
IF (DAYS(CONTA.IRES)-DAYS(SDATE)<-0) THEN %7:-%7 + CONTA.QTY$EQ
REPORT BOdy
IF (DAYS(CONTA.IRES)-DAYS(SDATE)<-0) THEN %7:-%7 + CONTA.QTY$EQ
REPORT SUMMARY
%7
  Row: 2 Col: 92 Printer attr: 0
Field length: 31 Print format: Left justified
String Value [30-60 DAYS REMAINING (POUNDS): ]
 Row: 2 Col:
Field length:
 Row: 2 Col: 123
Field length: 10
Calculated from: $5
                                                                                                    Printer attr: 0
Print format: General format
 Row: 3 Col: 93 Printer attr: 0
Field length: 30 Print format: Left justified
String Value [0-29 DAYS REMAINING (POUNDS): ]
  Row: 3 Col: 123
Field length: 10
Calculated from: %6
                                                                                                                                                                                                                                                                               String memory variable usage summary
                                                                                                    Printer attr: 0
Print format: General format
                                                                                                                                                                                                                                                                                     Selection Criteria
SMV(1,1):='*'
  Row: 4 Col: 105 Pri
Field length: 18 Pri
String Value (EXPIRED (POUNDS): 1
                                                                                                    Printer attr: 0
Print format: Left justified
  Row: 4 Col: 123
Field length: 10
Calculated from: $7
                                                                                                    Printer attr: 0
Print format: General format
  Memory variable usage summary
        Report Header
$0:=$0 + 1
               10
        Page Hoader
IF (DAYS(CONTA.IRES) -DAYS(SDATE) <-60) & (DAYS(CONTA.IRES) -DAYS(SDATE) >= 30) THE
        Report Body
IF (DAYS(CONTA.IRES) -DAYS(SDATE) <=60) & (DAYS(CONTA.IRES) -DAYS(SDATE) >=30) THE
Report Summary
85
         Page Header
IF (DAYS(CONTA.IRES)-DAYS(SDATE) <-29) & (DAYS(CONTA.IRES)-DAYS(SDATE)>0) THEN
```

	T
BOUL RD1	1 - 5977 33-127
PQUA.TR3 Version # 40 Date: 01/13/92 INVALID EMP DEPT CONTAINERS THAT MERE DRAWN DOWN BY EMPLS THAT MERE FROM INVALID DEPTS	1 - SMY(1,1):='*' EQ 2 - SMY! (300,4):=EMPL.DEPT
Generated from data contained in:	3 - SHY! (300,4)
PQUA CODATA EMPL CONTA	NE CONTA.DEPT
danial	4 - PQUA.USED NE
Application Relationships	0 Where 3 & 4 is TRUE
CODATA.KEY is found from data in SMY(1,1) REL TYPE = 2 EMPL.NUMBER is found from data in PQUA.REQUEST REL TYPE = 2	and a 4 12 two
CONTA.BER is found from data in PQUA.BER REL TYPE = 2	Update Printed Record
Change security: 0 Generate security: 0	No records will be updated by this report
Last user to modify this report: T	
Number of lines per page: 60	
Number of lines to use : 60 Line length of printer : 80 Midth of left margin : 0	REFORT HEADER Printer attribute for this block: 0
Spacing will be used to find the top of form	Line spacing for this block : 1 Number of lines following block : 2
Attribute to initialize printer for this report: 0 Negative numbers will be printed preceded by a dash -	Blank data lines WILL be printed The REPORT HEADER will be printed at the top of every page
Any temporary sort files will be placed on TEAM-UP drive: C Destination of this report: - This report MILL be abortable.	Row: 1 Col: 1 Printer attr: 0 Field length: 25 Print format: Left justified
This report MILL be abortable.	Extracted from: CODATA.COMPANY
A A	ROW: 1 Col: 59 Printer attr: 0 Field length: 13 Print format: Left justified String Value [REPORT DATE:]
Report Order Name Length Order	Row: 1 Col: 72 Printer attr: 0 Field length: 8 Print format: Left justified
PQUA.RECZIVED 0 A	Current system date
POUA.RECUIEST 5 A POUA.RECEIVED 8 A Total 13	ROW: 2 Col: 1 Printer attr: 0 Field length: 34 Print format: Left justified String Value (HAZARDOUS MATERIAL TRACKING SYSTEM)
Report will use index on POUA.RECEIVED Prompt for start key: ENTER START DATE: Prompt for stop key: ENTER STOP DATE:	Row: 2 Col: 63 Printer attr: 0 Field length: 11 Print format: Left justified String Value (REPORT): 69)
Selection Criteria	Row: 3 Col: 63 Printer attr: 12 Field length: 1 Print format: General format Calculated from: %0:=%0 + 1
Records to include must match the following criteria	Row: 3 Col: 65 Printer attr: 0 Field length: 7 Print format: Left justified
String Value [PAGE#:]	Row: 2 Col: 74 Printer attr: 0
Row: 3 Col: 72 Printer attr: 0 Field length: 3 Print format: General format	Field length: 6 Print format: Left justified String Value [POUNDS]
Calculated from: %0 Row: 5 Col: 5 Printer attr: 0	Row: 3 Col: 1 Printer attr: 0 Field length: 79 Print format: Left justified String Value [
Field length: 72 Print format: Left justified String Value [CONTAINERS THAT WERE HOVED OR DRAWN DOWN BY EMPLOYEES FROM INVALID	Sering value (
	WATU DEBOOR DOOR
PAGE HEADER	Printer attribute for this block: 0
Printer attribute for this block: 0 Line spacing for this block : 1	Line spacing for this block : 1 Number of lines following block : 0
Line spacing for this block : 1 Number of lines following block : 0 Blank data lines WILL NOT be printed	Blank data lines MILL be printed This block MILL NOT cause a page break
Row: 1 Col: 1 Printer attr: 0 Field length: 4 Print format: Left justified String Value [CNT#]	Row: 1 Col: 1 Printer attr: 0 Fleld length: 6 Print format: Left justified Extracted from: PQUA.BER
Row: 1 Col: 8 Printer attr: 0 Field length: 5 Print format: Left justified String Value (HPID#)	Row: 1 Col: 8 Printer attr: 0 Field length: 6 Print format: Left justified Extracted from: POUA.NUMBER
Row: 1 Col: 15 Printer attr: 0 Field length: 4 Print format: Left justified String Value (PROC)	Row: 1 Col: 15 Printer attr: 0 Field length: 4 Print format: Left justified Extracted from: PQUA.R
Row: 1 Col: 20 Printer attr: 0 Field length: 4 Print format: Left justified	Row: 1 Col: 20 Printer attr: 0 Field length: 4 Print format: Left justified Extracted from: PQUA.ID_NUMBER
String Value (AREA) Row: 1 Col: 26 Printer attr: 0 Field length: 4 Print format: Left justified	Row: 1 Col: 25 Printer attr: 0 Field length: 5 Print format: General format Extracted from: PQUA.REQUEST
String Value (EMPL) Row: 1 Col: 32 Printer attr: 0 Field length: 4 Print format: Left justified	Row: 1 Col: 32 Printer attr: 0 Field length: 4 Print format: Left justified Extracted from: EMPLDEPT
String Value (DEPT) Row: 1 Col: 38 Printer attr: 0 Field length: 4 Print format: Left justified	Row: 1 Col: 38 Printer attr: 0 Field length: 8 Print format: Left justified Extracted from: POUA.RECEIVED
String Value (DATE) Row: 1 Col: 65 Printer attr: 0 Field lenoth: 4 Print format: Left justified	Row: 1 Col: 59 Printer attr: 0 Field length: 9.4 Print format: General format
String Value [USED] Row: 1 Col: 73 Printer attr: 0	Row: 1 Col: 70 Printer attr: 0 Field length: 9.4 Print format: General format
Field length: 7 Print format: Left justified String Value (VOC AHT) Row: 2 Col: 63 Printer attr: 0	Extracted from: PQUA.GUNT
Field length: 6 Print format: Left justified String Value [POUNDS]	PAGE SUNMARY

here are n	o entries defined for this block
REPORT S	UHARY
hore are n	o entries defined for this block
emory vari	able usage summary
Report He	
tring memo	ry variable usage summary
SMV (1.1	O,4):=EMPL.DEPT
	V/1/

1 - SHV(1,1):-'*' Version # 47 Date: 01/13/92 INVAL PROC 4 HP INVALID PROC FOR A HAZARDOUS PRODUCT 2 - PQUA.USED NE 0 3 - SKY! (300,6):-PQUA.NUMBER:SKY! (306,4):-PQUA.R Generated from data contained in: CODATA PROCHP 4 - SMV! (300,10) NE PROCHP.PROCHP Application Relationships Where 2 & 4 is TRUE CODATA.KEY is found from data in SHV(1,1) -- REL TYPE = 2 PROCEP.PROCEP is found from data in PQUA.REQUEST -- REL TYPE = 2 PROCEP.PROCEP is found from data in SHV(300,10) -- REL TYPE = 2 Update Printed Record No records will be updated by this report Generate security: 0 Change security: 0 Last user to modify this report: T Number of lines per page: 60
Number of lines to use : 60
Line length of printer : 80
Width of left margin : 0
Spacing will be used to find the top of form REPORT HEADER Printer attribute for this block: 0
Line spacing for this block : 1
Number of lines following block : 2
Blank data lines MILL be printed
The REPORT HEADER will be printed at the top of every page Attribute to initialize printer for this report: 0 Negative numbers will be printed preceded by a dash -Any temporary sort files will be placed on TEAH-UP drive: C Destination of this report: - This report WILL be abortable. Row: 1 Col: 1 Field length: 25 Extracted from: CODATA.COMPANY Printer attr: 0 Print format: Left justified Row: 1 Col: 59 Field length: 13 String Value [REPORT DATE:] Printer attr: 0 Print format: Left justified Report Order Row: 1 Col: 72 Field length: 8 Current system date Printer attr: 0 Print format: Left justified Length Order POUX.RECEIVED POUX.REQUEST POUX.RECEIVED Row: 2 Col: 1 Printer attr: 0
Fleld length: 34 Print format: Left justified
String Value [HAZARDOUS MATERIAL TRACKING SYSTEM] Total 13 Row: 2 Col: 63 Field length: 11 String Value [REPORT#: 70] Printer attr: 0
Print format: Left justified Report will use index on PQUA.RECEIVED Prompt for start key: ENTER START DATE: Prompt for stop key: ENTER STOP DATE: Row: 3 Col: 63
Field length: 1
Calculated from: \$0:=\$0 + 1 Printer attr: 12 Print format: General format Selection Criteria Row: 3 Col: Field length: Printer attr: 0 Print format: Left justified Records to include must match the following criteria String Value [PAGE#:] Row: 2 Col: 74 Field length: 6 String Value [POUNDS] Printer attr: 0 Print format: Left justified Row: 3 Col: 72 Field length: 3 Calculated from: %0 Printer attr: 0 Print format: General format Row: 3 Col: Field length: String Value [--Printer attr: 0 Print format: Left justified Row: 5 Col: 14 Printer attr: 0 Field length: 55 Print format: Left justified String Value [HAZARDOUS PRODUCTS THAT MERE USED IN AN INVALID PROCESS] MAIN REPORT BODY Printer attribute for this block: 0 Line spacing for this block: 1 Number of lines following block: 0 Blank data lines MILL be printed This block MILL NOT cause a page break PAGE HEADER Printer attribute for this block: 0 Line spacing for this block : 1 Number of lines following block : 0 Blank data lines WILL NOT be printed Row: 1 Col: 1 Field length: 6 Extracted from: PQUA.BER Printer attr: 0 Print format: Left justified Row: 1 Col: 1 Field length: 4 String Value [CNT#] Printer attr: 0 Print format: Left justified Row: 1 Col: 8
Field length: 6
Extracted from: PQUA.NUMBER Printer attr: 0 Print format: Left justified Row: 1 Col: 8
Field length: 5
String Value (HPID#) Printer attr: 0 Print format: Left justified Row: 1 Col: 15 Field length: 4 Extracted from: PQUA.R Row: 1 Col: 15 Field length: 4 String Value [PROC] Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified Row: 1 Col: 20 Field length: 4 Extracted from: PQUA.ID_NUMBER Printer attr: 0 Print format: Left justified Row: 1 Col: 20 Field length: 4 String Value (AREA) Printer attr: 0
Print format: Left justified Row: 1 Col: 25
Field length: 5
Extracted from: PQUA.REQUEST Printer attr: 0 Print format: General format Row: 1 Col: 26 Field length: 4 String Value [EMPL] Printer attr: 0 Print format: Left justified Row: 1 Col: 32 Field length: 4 Extracted from: EMPL.DEPT Printer attr: 0 Print format: Left justified Row: 1 Col: 32 Field length: 4 String Value [DEPT] Printer attr: 0 Print format: Left justified Col: 38 Printer attr: 0 Print format: Left justified Row: 1 Col: 38 Field length: 4 String Value [DATE] Field length: 8
Extracted from: POUA.RECEIVED Printer attr: 0 Print format: Left justified Col: Row: 1 Col: 65 Field length: 4 String Value [USED] Printer attr: 0 Print format: General format Field length: 9.4 Extracted from: PQUA.USED Printer attr: 0 Print format: Left justified Row: 1 Col: 70 Field length: 9.4 Extracted from: PQUA.OUNT Row: 1 Col: 73 Field length: 7 String Value (VOC AMT) Printer attr: 0 Print format: General format Printer attr: 0 Print format: Left justified Row: 2 Col: 63 Field length: 6 String Value [POUNDS] Printer attr: 0 Print format: Left justified PAGE SUMMARY

There are	no entries defined fo	r this block		
REPORT	SUMMARY			
There are	no entries defined fo			
/amawa 110	riable usage summary			
MINDLY VA	crapte coade somers			
Report	Header 0 + 1			
10				
String me	mory variable usage su	mmary		
	on Criteria	_		
SM7/1	,1):='*' 300,6):=PQUA.NUHBER;SH	N! (306.4):=PO	UA.R	
SMV!	300,10)			

Selection Criteria Version # 54 HPCHEM. TR4 Date: 01/17/92 Records to include must match the following criteria CHEM ON HAND CHEMICALS ON HAND WITH FLAGS FOR OSHA, TOXIC 313, RQ, TPQ, AB2588 1£2 1 - SHV(1,1):='*' 2 - CONTA.QTYSEQ Generated from data contained in: HPCREM E2588 P2588 Where £ 2 is TRUE Application Relationships COONTA.KEY is found from data in SMY(1,1) -- REL TYPE - 2 CHEM.ER is found from data in HPCHEM.ER -- REL TYPE - 2 E2588.ER is found from data in HPCHEM.ER -- REL TYPE - 2 CONTA.NER is found from data in HPCHEM.ER -- REL TYPE - 1 TOX313.ER is found from data in HPCHEM.ER -- REL TYPE - 2 OSHA.ER is found from data in HPCHEM.ER -- REL TYPE - 2 P2588.ER is found from data in HPCHEM.ER -- REL TYPE - 2 Update Printed Record No records will be updated by this report REPORT HEADER Printer attribute for this block: 0
Line spacing for this block : 1
Number of lines following block : 2
Blank data lines MILL be printed
The REPORT HEADER will be printed at the top of every page Change security: 0 Generate security: 0 Last user to modify this report: SUPER Number of lines per page: 60 Number of lines to use : 58 Line length of printer : 132 Width of left margin : 0 Spacing will be used to find the top of form Row: 1 Col: 1 Printer attr: 0
Fleld length: 25 Print format: Left justified
Extracted from: CODATA.COMPANY Row: 1 Col: 59 Field length: 13 String Value [REPORT DATE:] Printer attr: 0 Print format: Left justified Attribute to initialize printer for this report: 0 Negative numbers will be printed preceded by a dash -Any temporary sort files will be placed on TEAM-UP drive: C Destination of this report: - This report MILL be abortable. Row: 1 Col: 7 Field length: Current system date 72 8 Printer attr: 0 Print format: Left justified Row: 2 Col: 1 Printer attr: 0 Field length: 34 Print format: Left justified String Value [HAZARDOUS MATERIAL TRACKING SYSTEM] Report Order Row: 2 Col: 63 Field length: 11 String Value [REPORT#: 71] Printer attr: 0 Print format: Left justified Length Name Order HPCHEM.ER Row: 3 Col: 63 Field length: 1 Calculated from: %0:=%0 + 1 Printer attr: 12 Print format: General format Total Report will use index on HPCHEM.ER Prompt for start key: ENTER CHEMICAL IDE: Default value for stop key: START Row: 3 Col: 65 Field length: 7 String Value [PAGE#:] Printer attr: 0 Print format: Left justified Row: 3 Col: Printer attr: 0 Field length: 3 Calculated from: 80 Print format: General format Row: 2 Col: 104 Field length: 2 String Value [HI] Printer attr: 0 Print format: Left justified Row: 5 Col: 17 Printer attr: 0
Field length: 49 Print format: Left justified
String Value [CHEMICAL INVENTORY ON HAND + SPECIALS LIST TOTALS] Row: 2 Col: 111 Field length: 2 String Value [HI] Printer attr: 0 Print format: Left justified Row: 2 Col: 121 Field length: 3 String Value [QTY] Printer attr: 0 Print format: Left justified PAGE HEADER Printer attribute for this block; 6 Line spacing for this block : 1 Number of lines following block : 0 Blank data lines MILL NOT be printed Row: 2 Col: 130 Field length: 3 String Value [QTY] Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified Row: 1 Col: 1 Field length: 7 String Value [CHEMID#] Row: 3 Col: 121 Field length: 3 String Value [LOW] Printer attr: 0 Print format: Left justified Row: 1 Col: Field length: String Value (CAS#) Row: 3 Cal: 130 Field length: 2 String Value [HI] Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified Row: 1 Col: 19 Field length: 11 String Value [DESCRIPTION] Row: 4 Col: Field length: String Value [--Printer attr: 0 Print format: Left justified Printer attr: 0 Print format: Left justified 110 Row: 1 Col: Field length: String Value [TOX] Row: 4 Col: Field length: String Value [--Printer attr: 0
Print format: Left justified Printer attr: 0 Print format: Left justified Row: 1 Col: Field length: String Value [OSH] Printer attr: 0 Print format: Left justified SUB REPORT HEADER #1 which breaks on change of HPCHEM.ER Row: 1 Col: 1 Field length : String Value [AB1] Col: 104 Printer attr: 0 Print format: Left justified Printer attribute for this block: 0
Line spacing for this block : 1
Number of lines following block : Blank data lines MILL NOT be printed
This block WILL NOT cause a page break Row: 1 Col: 111 Field length: 3 String Value (AB2) Printer attr: 0 Print format: Left justified Row: 1 Col: 1 Printer attr: 12
Fleld length: 1 Print format: General format
Calculated from: \$1:=0;\$2:=0;\$3:=0;\$4:=0;\$5:=0;\$6:=0 Row: 1 Col: 1 Field length: String Value [CRM] Col: 121 Printer attr: 0 Print format: Left justified Row: 1 Col: 1 Field length : String Value [CHM] Col: 130 Printer attr: 0 Print format: Left justified MAIN REPORT BODY Printer attribute for this block: 0
Line spacing for this block : 1
Number of lines following block : Blank data lines MILL NOT be printed
This block MILL NOT cause a page break Row: 2 Col: Field length: String Value [HI] Printer attr: 0 Print format: Left justified Row: 2 Col: Field length : String Value [HI] Printer attr: 0 Print format: Left justified Row: 1 Col: Printer attr: 12

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```
Field length: 1 Print format: General format Calculated from: IF -NULL(TOX313.ER) THEN $1:-$1 + CONTA.QTY$EQ*(HPCHEN.2/100)
                                                                                                                                                                         Row: 1 Col: 9 Filled length: 9 Filled length: 9 Filled Last contents of CHEM.NUMBER
                                                                                                                                                                                                                                     Printer attr: 0
Print format: Left justified
Row: 1 Col: 2 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF -NULL(TOX313.ER) TREN %7:-%7 + CONTA.GTYSEG*(HPCHEM.2/100)
                                                                                                                                                                         Row: 1 Col: 19
Field length: 68
The last contents of CHEM.NAME
                                                                                                                                                                                                                                     Printer attr: 0
Print format: Left justified
Row: 1 Col: 5 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF -NULL(OSHA.ER) THEN $2:-$2 + CONTA.OTY#EQ*(HPCHEM.2/100)
                                                                                                                                                                         Row: 1 Col: 8
Field length:
Calculated from: %1
                                                                                                                                                                                                             88
6
                                                                                                                                                                                                                                     Printer attr: 0
Print format: General format
Row: 1 Col: 6 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF -NULL(OSHA.ER) THEN $8:-$8 + CONTA.OTY$EQ* (HPCHEM.2/100)
                                                                                                                                                                         Row: 1 Col: 95
Field length: 6
Calculated from: 82
                                                                                                                                                                                                                                      Printer attr: 0
Print format: General format
Row: 1 Col: 9 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: IF -NULL(E2588.ER) THEN %3:-%3 + CONTA.QTY*EQ*(HPCHEM.2/100)
                                                                                                                                                                         Row: 1 Col: 102
Field length: 6
Calculated from: $3
                                                                                                                                                                                                                                      Printer attr: 0
Print format: General format
Row: 1 Col: 10 Printer attr: 12
Field length: I Print format: General format
Calculated from: IF -NULL(E2588.ER) THEN %9:-%9 + CONTA.QTY$EQ*(HPCHEM.2/100)
                                                                                                                                                                         Row: 1 Col: 109
Field length: 6
Calculated from: 84
                                                                                                                                                                                                                                      Printer attr: 0
Print format: General format
Row: 1 Col: 12 Printer attr: 12
Flold length: 1 Print format: General format
Calculated from: IF -NULL(P2588.ER) THEN %4:-%4 + CONTA.QTY@EQ*(HPCHEM.2/100)
                                                                                                                                                                         Row: 1 Col: 116
Field length: 8
Calculated from: 85
                                                                                                                                                                                                                                      Printer attr: 0
Print format: General format
Row: 1 Col: 13 Printer attr: 12
Fleid length: 1 Print format: General format
Calculated from: IF -NULL(P2588.ER) THEN %10:-%10 + CONTA.OTY#EQ*(HPCHEM.2/100)
                                                                                                                                                                         Row: 1 Col: 125
Field length: 8
Calculated from: %6
                                                                                                                                                                                                                                      Printer attr: 0
Print format: Géneral format
Row: 1 Col: 15 Printer attr: 12
Fiold length: 1 Print format: General format
Calculated from: $5:=$5 + CONTA.QTY$EQ*(RPCHEM.1/100)
Row: 1 Col: 16 Printer attr: 12
Field length: 1 Print format: General format
Calculated from: %11:-%11 + CONTA.OTY#EO* (RFCHEM.1/100)
                                                                                                                                                                               PAGE SUMMARY
                                                                                                                                                                         There are no entries defined for this block
Row: 1 Col: 19 Printer attr: 12
Flold length: 1 Print format: General format
Calculated from: %6:=%6 + CONTA.QTY$EQ*(RPCHEM.2/100)
                                                                                                                                                                               REPORT SUMMARY
Row: 1 Col: 20 Printer attr: 12
Floid length: 1 Print format: General format
Calculated from: $12:-$12 + CONTA.GTY#EQ* (RPCREM.2/100)
                                                                                                                                                                         Printer attribute for this block: 6
Line spacing for this block : 1
Number of lines preceding block: 0
Blank data lines WILL NOT be printed
                                                                                                                                                                         Row: 1 Col:
Field length:
String Value [-
                                                                                                                                                                                          Col:
                                                                                                                                                                                                                                      Printer attr: 0
Print format: Left justified
      SUB REPORT SUMMARY $1
Printer attribute for this block: 6
Line spacing for this block : 1
Number of lines preceding block : 0
Blank data lines NILL NOT be printed
                                                                                                                                                                         Row: 1 Col:
Field length:
String Value [-
                                                                                                                                                                                                                                      Printer attr: 0
Print format: Left justified
-----]
                                                                                                                                                                         Row: 2 Col: 73
Field length: 15
String Value [REPORT TOTALS: ]
 Row: 1 Col: 1
Field length: 6
The last contents of HPCHEM.ER
                                                             Printer attr: 0
Print format: Left justified
                                                                                                                                                                                                                                      Printer attr: 0
Print format: Left justified
                                                                                                                                                                        $3
Sub-report Header #1
$1:=0;$2:=0;$4:=0;$5:=0;$6:=0
Report Body
IF "NULL(E2588.ER) THEN $3:=$3 + CONTA.OTY#EQ*(HPCHEM.2/100)
Sub-report Summary #1
$3
 Row: 2 Col: 88
Field length: 6
Calculated from: $7
                                                              Printer attr: 0
Print format: General format
 Row: 2 Col: 5
Field length :
Calculated from: 88
                                                               Printer attr: 0
Print format: General format
 Row: 2 Col: 102
Field length: 6
Calculated from: 89
                                                               Printer attr: 0
Print format: General format
                                                                                                                                                                            4
Sub-report Header #1
%1:=0;%2:=0;%3:=0;%4:=0;%5:=0;%6:=0
Report Body
IF -NULL(P2588.ER) THEN %4:=%4 + CONTA.QTY#EQ*(HPCHEM.2/100)
Sub-report Summary #1
%4
 Row: 2 Col: 109
Field length: 6
Calculated from: $10
                                                               Printer attr: 0
Print format: General format
 Row: 2 Col: 116
Field length: 8
Calculated from: %11
                                                               Printer attr: 0
Print format: General format
                                                                                                                                                                             Sub-report Header #1
%1:-0:%2:-0:%3:-0:%4:-0:%5:-0:%6:-0
Report Body
%5:-%5 + CONTA.OTT#EQ*(EPCHEH.1/100)
Sub-report Summary #1
%5
 Row: 2 Col: 125
Field length: 8
Calculated from: $12
                                                               Printer attr: 0
Print format: General format
                                                                                                                                                                         %6
Sub-report Header #1
%1:=0;$2:=0;$3:=0;$4:=0;$5:=0;$6:=0
Report Body
%6:=%6 + CONTA.OTYPEO*(HPCHEM.2/100)
Sub-report Summary #1
%6
 Memory variable usage summary
      Report Header
10:-10 + 1
                                                                                                                                                                             Report Body
IF -NULL(TOX313.ER) THEN %7:-%7 + CONTA.QTY@EQ*(HPCHEN.2/100)
Report Summary
%7
     Sub-report Reader #1
%1:-0:%2:-0;%3:-0;%4:-0;%5:-0;%6:-0
      Report Body
IF -NULL(TOX313.ER) THEN %1:-%1 + CONTA.OTY$EO*(HPCHEM.2/100)
Sub-report Summary $1
                                                                                                                                                                              Report Body
IF -NULL(OSHA.ER) THEN %8:-%8 + CONTA.GTY#EQ* (HPCHEM.2/100)
Report Summary
%8
      2
Sub-report Header #1
%1:-0;%2:-0;%3:-0;%4:-0;%5:-0;%6:-0
Report Body
IF -NULL(OSHA.ER) THEN %2:-%2 + CONTA.GTY#EQ*(HPCHEM.2/100)
Sub-report Summary #1
                                                                                                                                                                              Report Body
IF -NULL(E2588.ER) THEN $9:-$9 + CONTA.QTYPEQ*(HPCHEM.2/100)
Roport Summary
```

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10 Report Body IF -NULL Report Summ	?2588.ER) THEN %10:-%10 + CONTA.QTY\$EQ*(RPCHEM.2/100) REY	
Report Body 11:-11 Report Summ	CONTA.OTY#EQ*(HPCHEM.1/100)	
Report Body \$12:=\$12 Report Summ \$12	CONTA.QTY EQ* (HPCHEM.2/100)	_
Selection C SMV(1,1):	variable usage summary titeria , s'	
· · · · · · · · · · · · · · · · · · ·		

Appendix F: CA AB2588 Chemicals

The data entered into the Master Application Menu, options 41 CA AB2588 A-I Chemicals and 42 CA AB2588 A-II Chemicals, were obtained from the State of California Air Resources Board's <u>Technical Guidance Document to the Criteria and Guidelines Regulation for AB-2588</u>, August 1989 issue.

The following chemicals were not identified in the CHEM Master database. This listing is provided for the user(s) who would like to pursue identification of these chemical identification numbers.

Androgenic (anabolic) steroids

Chlorophenoxy herbicides

Estrogens, nonsteroidal

Estrogens, steroidal

Progestins

Alpha-chlorinated toluenes

Benzidine-based dyes

Bromine compounds (inorganic)

Chlorophenols

Creosotes

Dialkylnitrosamines

Environmental tobacco smoke

Fluorocarbons (chlorinated & brominated)

Glycol ethers

Hexachlorocyclohexanes

Isocyanates

Lead compounds (inorganic)

Mineral fibers

PAHs (polycyclic aromatic hydrocarbons)

Silica, crystalline

Appendix G: TEAM-UP Reference Manual

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System Security

Introduction

Security is an integral part of the TEAM-UP environment; however, it is only as good as the management behind the security.

Initial entry into TEAM-UP is through a sign-on procedure. The user is recognized by a username and a password. Once identified, the user is granted or denied access to various functions within TEAM-UP based on authorizations assigned by the system manager.

Security will take on various forms:

- 1. group security
- 2. menu security
- 3. function security
- 4. item security

These levels allow management to build a "tree" type structure of security. The further out on the limb a user is, the fewer processes he can perform. Conversely, the closer the user is to the trunk of the tree the more authority he will have. A system is made up of many trees. Each tree trunk becomes a group, the menus provide the limbs, branches allow functions within applications (enter, update, delete, etc.); finally, that "leaves" numeric hierarchy levels to control screen item access.

Any user with authority to access System security can change groups, add and delete users, alter passwords and adjust security levels.

AUTHORIZATION INTO SECURITY SHOULD BE RESTRICTED TO THE SYSTEM MANAGER AND PERHAPS ONE OR TWO OTHER TRUSTWORTHY USERS.

The Security Menu

TEAM-UP's Security Menu lists four activities. The first two enable the system manager to enter, delete or modify user and application security. The third and fourth activities generate report listings of users and application groups.

Users

Select Set User Security to manipulate user security levels. There is no limit to the number of users. More than one person can sign on by using the same username/password from any station in a network environment.

The security information on each user is stored collectively in the file TEAMUP.USR. Destruction of this file will render your system useless.

The first forty users in the system are displayed at the top of the screen upon entry into User Security. If more than forty users currently have access, [FG UP] and [PG DN] may be used to scroll through the list. Choose a user by moving the highlight over the username and [RET]. If adding a new user to the system, type the username and [RET]. This will present the Security Maintenance information at the bottom of the screen.

Cursor movement within this screen from option to option is accomplished via [TAB], [ARROWS], [HOME] and [END] keys. The [RET] key will save all changes. The [ESC] key will abort the maintenance process with no changes made. The [DEL] key will delete the user from Security, and [INS] will allow another *user's* parameters to be duplicated (see Copy a User).

Add a User

Since entry to the TEAM-UP system is via username and password, each person who uses the system must be assigned a username and password. After selecting Team Menu choice #4 and entering System Security, type the username of the new user and [RET].

Copy a User

An added user often requires the exact security parameters as an existing user. To copy a user, press [INS] at the Security Maintenance screen and use the [ARROW] keys to move the highlight to the user whose security parameters YOU wish to copy. Press [RET] and the parameters will be copied. This does NOT copy the password. Make any other changes and exit with a [RET] to save your work. The new user will now be a part of the system.

Caution: Pressing [ESC] will exit security and current work will be lost.

Delete a User

Select the user. When the Security maintenance screen for that user is displayed, press [DEL] and confirm the prompt by typing a Y. The user will be deleted from the system.

Username

A Username is any string of eight or less characters.

Password

A Password is any string of eight or less characters or simply a [] (space) if you do not wish to assign a password.

Each user in the system has a unique password. This password is entered on the Security Maintenance screen and is never again displayed in a readable form. [????????] will display when a password is entered. The password is stored in an encrypted form so it will not be accessible/readable from the operating system level.

The password is not echoed to the screen at sign-on time. Should a user forget his password, a new password must be assigned.

Change a Password

Select the user whose password you want to change from the list at the top of the Security Maintenance screen. Press the [TAB] key to the password option and enter the new password. Press [RET] to save the changes.

Typing TEAMPASS from the operating system prompt is an alternative method of changing a password. This program allows any user to change his password without entering Security. The program will ask for username, old password and new password. A user can include this executable program on a Procedural Language menu.

Autoload Application

Autoload Application allows a user to be placed automatically into a Data Manager application after sign-on. Type the name of the application within the brackets to use this feature.

NOTE: If Autoload Application contains the name of an application and the next feature, Autoload Menu Path is NOT used--the system merely highlights the first application on the list displayed.

Autoload Menu Path

Autoload Menu Path takes the user from the sign-on screen to whatever place in the system an entered "dot" path specifies. Enter the "dot" path designator within the brackets to use this feature.

Terminal Init File (TIF)

Use of the Terminal Init File is optional. Setting up a .TIF file requires special programming in hexadecimal and a good understanding of the terminal hardware. It is something only experienced computer users should attempt.

Each user may have a special Terminal Initialization File that is stored as username.TIF and will allow each user to program their own function keys. When the user signs on, the file is read and whatever information it contains is sent to that user's terminal.

What one must realize is that establishing a .TIF file is NOT a function of TEAM-UP. The user must create this file by using a DOS utility such as DEBUG. The file should be given the username as the file name with an extension of .TIF. TEAM-UP merely provides for the TIF's drive letter to indicate its existence and location.

To establish the .TIF TEAM-UP location, place the drive letter indicating the directory containing the file within the brackets.

User's Security Level

Each user in the system will have a numeric security level from O to 9. The default level for a new user is O (zero), the lowest possible level.

The User's Security level is compared with the security level assigned to any application or application function within TEAM-UP. In order to be allowed access to or perform a function on an application, the user level must be equal to or greater than the level assigned to the application or application function.

User's ID Number

The User's ID number is used to stamp records when using Record Security. If you do not need to use Record Security, [TAB] past this entry. If necessary, enter a number between O and 9999.

When the application's Record Security is active, the user ID number is stamped "invisibly" on each record entered by the user. After a record is stamped, ONLY THAT USER (or other user with the same user ID or a higher security level) can retrieve that record from the application. The User's ID number need not be unique if you wish more than one user to see certain records. Remember, even if two or more user's ID numbers are the same, their respective security levels may allow or disallow certain program functions.

User Group Membership

Group membership by user is established on the third screen of user security. To access this screen, press the [PG DN] key.

To add a user to a group, see Add a User to a Group.

The Trunk

Group Security

Group Security is the highest level of security in the TEAM-UP environment. Both the user and application must be members of at least one identical group before access is allowed. By default, all users and all applications are members of all groups. Therefore, if you do not need to use this feature, you can ignore its existence.

CLGROUPS .EXE, a utility program, can be used to reset Group security membership to its default value (when installed) for all users and all applications. Operation of this program is fully documented in the Utility Programs section. Access to the program should be carefully controlled as it could be used to totally defeat Group security.

The information on Groups is stored in the file TEAMUP.GRP. This file should be backed up periodically by the System Manager.

Group Philosophy

The philosophy behind Groups is to provide the ability to segment applications into areas of responsibility, i.e. administration, sales, personnel, etc. These segments, or "trunks", become the groups under which applications will operate. For example, under the administration group you may have applications for appointments, budgets, forecasting, etc. The sales group might contain order entry, inquiries, customers or daily sales stats. In the personnel department there would be employee records, payroll or insurance.

TEAM-UP's System Security permits the establishment of Groups throughout its environment. When an application is created, one of the featured processes (Group) allows you to define what group(s) the application will belong to. You can create an application's Group that MUST intersect with System Security's Group in order for the application to be accessed by the user. Users with identical Security Levels can therefore be unable to access each other's applications for the simple reason that they don't belong to the same Group.

Remember, System Security establishes the Groups for the TEAM-UP environment. Each application defines its group membership(s).

Setting Group Security

Group Security is accessed by pressing [PG DN] from the security maintenance screen. The user is presented with a screen listing the names of all groups within the system.

The user you are currently working with is a member of all groups that are highlighted. By default, ALL users and ALL applications are members of ALL Groups when originally entered into the system.

Press [PG DN] again to save Group Security.

Add a Group

Groups are entered into the system through the second screen of User Security. To add a Group, choose any username. From the User Security maintenance screen press the [PG] DN] key to reach-the Group security window. Move the pointer(>) with the [ARROW] key until the first blank line is reached and enter the name of the Group. Group names are 1 to 15 characters in length, including blanks.

To SAVE your entries press the [PG DN] key. Exiting with [ESC] causes all changes to be lost.

NOTE: All users are automatically members of this new Group unless the user has been previously removed from any group.

ANY APPLICATION OR USER WHO IS NOT TO BE A MEMBER OF THIS GROUP MUST BE INDIVIDUALLY REMOVED.

Delete a Group

Once created, a Group CANNOT be deleted. It may, however, be renamed by overwriting with a new name. If deleting a Group is necessary, remove all user members and all application members of the Group which will leave it null.

Caution! Any new users or new applications are automatically members and must be removed from this Group.

NOTE: Deleting all groups from an application renders that application inaccessible except through the Application Security Menu selection of Security.

Add User to a Group

All users, when entered into Security, are automatically members of all Groups. If you have removed a user from a Group, that user can be restored to membership in the Group.

Enter System Security, choose that user and [PG DN] to reach the Group Security window. Place the (>) next to the proper Group name and press the [INS] key. A highlighted Group name indicates the user is a member of that Group.

Exit and save by pressing [PG DN].

Delete User from a Group

Enter System Security, choose that user and [PG DN] to reach the Group Security window. Place the (>) next to the proper Group name and press the [DEL] key. The highlight over the Group name will disappear and the user is no longer a member of that Group. Once removed from a group, however, the user will no longer be added when a new group is created. The user is considered a "limited access user". The system manager must add such users individually.

Exit and save by pressing [PG DN].

The Limbs

Menu Access

At sign-on time, entering a correct username and password presents the user with the TEAM MENU. Access to the components of this menu is granted or denied to the user by the parameters established for that user in System Security. Entering a Y for the corresponding menu selection allows the user access to that part of TEAM-UP. An N denies access to the user and the user will see an asterisk (*) in place of the menu selection.

Access to DATA MANAGER
Access to ACCOUNTANT
Access to Text Editor
Access to System Security
Access to Operating System

Access to Data Manager

Users granted access to Data Manager will be allowed to view the Data Manager Menu. Access to each menu selection may be granted or denied to the user by entering a Y or N next to the prompt that corresponds to the Data Manager Menu selections. A response of N causes the corresponding selection to appear as an asterisk (*) on the Data Manager Menu.

Data Manager - Access Data

Responding with a Y to Access Data allows the user to view all applications permitted by Group and Security Levels. (Security Levels are discussed later in this section). The functions that a user can perform on individual applications are controlled by the various Function Securities assigned within the application.

Data Manager - Report Data

Responding with a Y to Report Data allows the user to view all applications permitted by Group and Security Levels. Access to the various reports under an application is a function of the security level assigned in each Report and the Print Security level assigned within the application.

Data Manager - Import Data

Responding with a Y to Import Data allows the user to view all applications permitted by Access Data. Granting access allows the user to move data from external ASCII or DIF file formats into an application.

Data Manager - Design

Responding with a Y to Design permits a user to select Design Applications (selection 4) from the Data Manager Menu and enter a second menu. The user is given the individual design functions of Create/Change, Define, Enlarge, etc. Granting Design Applications Menu capabilities allows the user to view the same applications as Access Data and perform only those design functions which were granted under Security.

Data Manager - Maintain

Responding with a Y to Maintain permits a user to select Maintain Applications (selection 5) from the Data Manager Menu and enter a second menu. The user is given the individual maintenance functions of Enlarge, Reindex, Reorganize, Copy, Delete, Etc. Granting

Maintain Menu capabilities allows the user to view the same applications as Access Data and perform only those maintenance functions which were granted under Security.

Accountant

This is a separately purchased package that is accessed from the TEAM Menu. Access to this package, if purchased, gives the user access to a complete transaction-oriented, integrated accounting package.

Text Editor

Access to the Text Editor allows a user to create and alter any text file on the system.

The Branches

Application Security

Each application in the TEAM-UP environment is secured in two ways: 1) through Group Membership Security and 2) through a Security Level assigned to the application itself and individual security levels or the various functions performed against the application. Security can even be given to data items.

Group Security is reviewed earlier in this reference section.

The second type of security, discussed in the following paragraphs, applies to the various functions performed against an application. It is based on the assigned user security level and the assigned application security level. Each application has a Master Security level, Security levels for the various functions and Security levels for each data item. The default for each type of security upon the creation of an application is 0.

Master security and Function security for an application can be set or changed in Design Applications, Create/Change or System Security, Set Application Security. Item security for a particular data item can be set or changed in Design Applications, Define. When a user attempts to execute a function (Find, Update, Enter, etc.), its security value is compared against the User's Security level. If an individual User's Security level is less than the security level for that function, that function is unavailable and will not execute.

Master Security

Master Security is used to determine which users can access an application. A User's Security level must be greater than or equal to an application's Master Security for that user to have access to the application. If the User's Security level is less than the application Master security, the list of applications displayed to that user will NOT include the application.

Function Security

The Function Security levels for an application control who can perform functions on the application. The functions Find, Enter, Update, Delete, Print and Batch each have their own security by application. A user can be denied the right to perform any of these functions by setting security higher than the User's Security level.

If an individual User's Security level is less than the function security, the function will not be performed and the message "Command Not Allowed" is displayed on the screen.

NOTE: If records are being processed indirectly as a related application through the Procedural Language, the Security is not checked.

Audit Security

Audit Security allows records that are deleted or changed by an operator whose User security level is less than the functional Audit Security level to remain invisibly in the application's data file until assigned to another location or removed by the Remove Records function.

The number of Audit Records contained in an application can be seen via Maintain Applications, Show Status.

Record Security

Record Security is a functional security option that can be turned on or off in the Create/Change portion of Design Applications.

Records, as they are entered, will be stamped with the User's ID Number of the user entering the record if Record Security is turned ON.

The Leaves

Item Security

Item Security allows a user to access items in a single application on an item-per-item basis. It controls whether or not a user will see a particular item. If an individual User's Security level is less than a particular item's security level, that item will NOT appear on the user's screen, thus protecting sensitive data areas.

Item Security applies to the Tab Skip option found in Design Applications, Define. If the User's Security level is less than a particular item's Tab Skip security level, the cursor will NOT stop on that item. The user can see the information on the screen, but he may not change it.

Miscellaneous

Terminal Keyboard Lockout

TEAM-UP provides a keyboard lock to protect access when an authorized user leaves the computer for a short period of time. To lock an IBM or IBM compatible keyboard, press the [ALT] and [F2] keys simultaneously. Other keyboards may be programmed during INSTEAM. Unless the NEXT key is part of the unlock sequence, TEAM-UP will beep whenever any key is pressed while the keyboard is locked.

To unlock the keyboard, press [ALT] and [F2] simultaneously. Type your password EXACTLY AS IT WAS TYPED WHEN YOU FIRST SIGNED ONTO TEAM-UP, followed by [RET].

Data File Encryption

Additional security can be applied to any application in the form of data file encryption. When a file is in an encrypted form, data is not recognizable from the operating system level. It can only be viewed through TEAM-UP by a user with proper security authorization. The Encrypt function is activated through the Design Applications Menu.

Error Recovery

Loss of the file TEAMUP.USR could cause loss of User Security definitions. The System Manager should make backup copies of this file after every change has been made to a user's security access authorization. Use the most recent backup copy to restore access to your system should the active TEAMUP.USR file be destroyed. The File TEAMUP.USR can be restored from the original TEAM-UP distribution disks should no other alternative be available. Access to TEAM-UP will then be restricted to the username and the password PASSWORD. All users will have to be redefined.

Access Data Operations

Introduction

Data Manager's Access Data section is the driving force of TEAM-UP; all other areas of the product provide support. In this area information is retrieved, changed, deleted and entered. Access Data uses a screen-oriented Query-By-Example method of data entry and retrieval. Its operation is so intuitive that most people can learn it in minutes.

Access Data Operations

All screen and keyboard handling is pre-programmed; however, a Procedural Language is available so an application developer can describe custom processes that must occur for any given operation. Very sophisticated custom processes can exist for an application without the end user's knowledge or concern.

In a typical application development scenario, the custom Procedural Language process requires between 5 and 20 percent of the total effort. The remaining 80 to 95 percent is consumed by those functions that are already programmed and fully tested in TEAM-UP.

Screen Definition

There are two basic display modes when accessing Data Manager applications:

* Full Screen mode

* Oneliner mode

Full Screen Mode

Each application can contain up to 255 pages of information in the Full Screen Mode. Each page contains a Command area, a Message line and a Free Form Application area. The Command area of Access Data's screen is the ten characters in the upper left corner of the screen. This area contains two pieces of information:

* Actual command letter followed by a blank space

* Name of the application

Access Data's single letter commands are phonetically easy to remember. The most frequently used commands are:

F for Find

E for Enter

U for Update

D for Delete

Other commands that are used less often, but are equally important:

C for Calculate

O for Oneliner

R for Report

P for Print

B for Batch

The name of an application must be eight characters or less in length. This name is originally defined by the application developer and is used to identify that application. The Message line is the last line on the screen. This line displays error messages, selected item information, current page number and time of day. The Data Block is a template of item names and data areas used to enter record selection criteria, display application data and enter new or changed data.

The display of individual items can be suppressed for specific levels of users through the implementation of User Security Levels and Item Security Levels. This enables sensitive information to be stored in records without the operator's knowledge.

A basic application item is represented as an item name ending in a colon (:) with areas for data display represented by underscores (_) and terminated with a period (.). The colon and the period can be changed in all applications by the TEAM-UP INSTEAM utility. Individual applications can be changed via Design Applications, Create/Change, Options.

The **Oneliner Mode**

This mode is automatically activated when any data retrieval or Find operation does not result in an exact match with the selection criteria. The Oneliner screen displays selected record items, one record to a line, with up to 20 records on a page. There are two Oneliner screens:

* Standard Oneliner screen

* Alternate Oneliner screen

The items displayed on the Standard Oneliner screen are defined by the application developer using the Define Items function. The items displayed on the Alternate Oneliner screen can be defined and redefined by the operator from within Access Data. The process requires two keystrokes, as explained in The Oneliner Operations [O] section.

Access Data Keyboard Controls

Cursor Movement

Cursor Movement within an application in Access Data is accomplished through the use of the ARROW keys, the [TAB], [BTAB], [BSPCE], [PAGE UP] and [PAGE DOWN] keys.

From the Full Page Mode . . .

Movement from Page to Page; Movement from Page to Page only occurs for applications that have more than one page. The [PAGE UP] key causes the preceding page to be displayed with the cursor in the first item position. If the first page is displayed when the [PAGE UP] key is pressed, the last page appears. If the cursor is in the home position and the [BTAB] key is pressed, the preceding page is displayed with the cursor located in the data area of the last item on the screen. The [PAGE DOWN] key causes the next page to be displayed with the cursor in the first item position. If the last page is displayed when the

[PAGE DOWN] key is pressed, the first page is then displayed. If the cursor is in the data area of the last item on the screen and the [TAB] key is pressed twice, the next page is displayed with the cursor in the first item on the screen.

Movement to the Home Position; Press the [HOME] key to move the cursor to the first position of the command area. Press the [HOME] key twice from any page of an application and the system returns to page one.

Movement from Item to Item; The [TAB] and [BTAB] are the primary keys used to move the cursor from item to item. The cursor does not stop in the data area of those items where a tab skip has been defined. Press the [TAB] key and the cursor moves to the next available item. If that item is on the next page, the cursor will position itself directly after the last item on the page and wait for another [TAB] to go to the next page. [BEG LN] and [END LN] keys may be used to move to the beginning of an item and the end of an item, respectively. Press the [BTAB] key and the cursor moves to the previous available item. If that item is on the preceding page, the page change occurs automatically.

If the cursor is in the first data position of the item and the [LEFT ARROW] is pressed, the cursor moves to the first data position of the item immediately to the left or the last item on the previous line. If the item is the first item on the page, the cursor moves to the home position. If the [UP ARROW] is pressed, the cursor will travel as vertically as possible from item to item. If the cursor is in the last data position of the item and the [RIGHT ARROW] is pressed, the cursor moves to the first data position of the item immediately to the right or the first item on the next line. If the item is the last item on the page, the cursor will position itself directly after the last item and wait for a [RIGHT ARROW] or [TAB] to go to the next page. If the [DN ARROW] is pressed, the cursor will travel as vertically downward as possible from item to item.

Movement within an Item's Field; The ARROW keys are used to move the cursor around the data area of an item without changing the data displayed. If the item's data spans more than one line, the [UP ARROW] and the [DOWN ARROW] keys move the cursor from line to line.

From the Oneliner Mode . . .

The Oneliner Mode is operational only during a Find operation.

Movement from Page to Page; The Oneliner mode supports scanning through application data records that meet specified search criteria. Since more than one page of records can meet this criteria, it is necessary to move from page to page within the Oneliners. The [PAGE DOWN] key causes the next page of records, sorted in ascending order, to be displayed. The [PAGE UP] key causes the preceding page of records to be displayed in descending order. The [ACT] or [END] keys repeat the previously selected page movement, providing the cursor is in the HOME position.

Movement from Record to Record; The [TAB] or [DN ARROW] keys move the cursor from the home position to the left of the first displayed Oneliner record, then from the first to the

second, etc., and from the last back to the home position. The [BTAB] or [UP ARROW] keys operate like the [TAB] key except cursor movement is reversed.

Oneliner Mode Operations

* Enter an application name or menu path in the first 12 positions of the command area and press [ACT] to change from one application to another.

* Press [ESC] to re-display the screen which contains the selection criteria.

* Tab or backtab to the left of a oneliner and press [ACT] or [END] to display the full screen of the selected record.

* Use a Oneliner activity (see this section - The Oneliner Operations).

* Invoke an Alternate Order of items displayed in the oneliners (see this section - The

Oneliner Operations).
* When the message '[ACT] for more oneliners' is displayed, press [ACT] to display

more records on the one per screen.
* If the message 'Search completed' appears, press [ACT] to re-display the full screen containing the selection criteria.

Activate Commands

Access Data commands are activated in one of two ways:

- * The [ACT] key. When this key is pressed, the command in the upper left comer of the screen is initiated. TEAM-UP, when installed, is configured to use the [RET] key as the [ACT] key. Keyboards can be re-configured as desired via the INSTEAM program.
- * Control keys represented by ^ ([CTRL]). For example, ^E directs the user to hold down the [CTRL] key and simultaneously press the letter [E]. A ^E activates the Enter command, REGARDLESS OF WHAT COMMAND SHOWS IN THE COMMAND AREA OR WHERE THE CURSOR IS LOCATED ON THE SCREEN! The control [CTRL] key overrides any command letter that is presented in the command area. The user can reduce processing time by using F for Find. E for Enter, 'U for Update, 'D for Delete, 'C for Calculate, 'B for Batch, 'P for Print, R for Report or any other control keys that have been defined by the application developer.

Selecting an Application

An application can be selected from the application list displayed upon initial entry to Access Data or upon exiting a displayed application. As with other areas of TEAM-UP, access to any application can be limited with the use of Group Security, as well as User Security level and Application Master Security level.

From the Application List

At the Application List, use the [TAB], [BTAB], ARROW, etc., keys to highlight the desired application and press [ACT] to activate the selection. If more applications are available than can be shown on one screen, the [PAGE UP] and [PAGE DOWN] keys will scroll through the available list to find the appropriate application.

From an Access Data Help Page

With either the System Help Page or an Application Help Page displayed, press [ACT] to reactivate a previously selected application.

From Another Application

Place the cursor in the home position, type the name of the desired application and press [ACT]. Users may also exit Access Data and select the application from the Application List.

Requesting Help

User-definable help is available at the system level and at the application level. The System Help Page contains general information about the operation of Access Data. The Application Help Page contains information about the operation of a specific application.

The System Help Page

Place the cursor in the home position and press the [HLP] key. Return to the previously selected application by pressing [RET].

An Application Help Page

With the application selected, place the cursor anywhere in the data block area and press the [HLP] key. Return to the previously selected application by pressing [RET].

Working with the Application

Clearing the Application Form

Place the cursor in the home position and press [RET]. All item data areas will be cleared to underscores. This should be done before initiating a Find or Enter operation. The [DEL OEL] or ^Z (zap) function may be used to: (1) clear the entire record if performed from the HOME position or (2) erase from the position of the cursor to the end of the record.

[B]-The Batch Operation

A Batch operation is performed when similar changes are made to large numbers of records. The procedure is as follows:

- * Describe the operations you wish to perform by using the Procedural Language. * Enter the record selection criteria in the same manner as described for the Find operation (see the Find operation, below).
- * Activate the Batch operation by pressing [ACT] with a B in the home position or by using a ^B from anywhere on the screen.
 * TEAM-UP then Finds a record and updates it using the Batch Procedural Language.

If a Batch program has NOT been made part of the application, the Batch process does not make any changes to the application. Remember, TEAM-UP will check the program before execution and any discrepancy will halt the procedure. If, when the Batch command is activated, the second position of the command area is blank, then each record found which satisfies the specified selection criteria is automatically Updated without any operator intervention. However, if the second position of the Batch command area contains an underscore (_), TEAM-UP asks the operator to confirm each record's Batch Update operation before it takes place.

EXAMPLE: B_PARTS

When this mode is in operation, TEAM-UP Finds a record that meets the selection criteria, displays the Oneliner version of that record and waits for an operator response. If the response is:

- * Y The record is updated, a new record is found and another prompt is issued.
- * N The record is NOT updated, a new record is found and another prompt is issued.

This process continues until all records in the application that satisfy the selection criteria have been processed. The Batch process can be canceled at any time by pressing the [ESC] key.

NOTE: When the cancel capability is exercised, those records that have already been processed remain updated. The ability to use the Batch operation can be secured using user security level and application Batch security.

[C] The Calculate Operation

The Calculate command can be activated by pressing [ACT] with a C in the home position or by using a ^C from anywhere on the screen. The Calculate or Read Only operation causes the processing of an application's Procedural Language to take place but NO changes will be entered in any files. This command can be used even if a record has not been previously found. It is generally used by an operator to determine if the keyed data entry is correct before an Enter or Update command is used.

[D] The Delete Operations

The Delete operation can be performed from either the Full Screen or Oneliner mode. The Delete Record operation does not cause an associated PL program to be executed unless it contains a test for the Delete Operation. If Audit Security is not active on an application, the indexes that point to the selected records are removal and the space it occupies is recaptured for use during a subsequent Enter command. If Audit Security is active on an application, the selected records are marked as inactive, its indexes are removed and the data remains in the record for audit purposes. These inactive records can be removed with the Remove Records function. The ability to Delete can be secured using User Security levels and Application Delete Security.

<u>Full Screen Delete</u>; In this mode, the Delete command can be activated by pressing [ACT] with a D in the home position or by typing a ^D from anywhere on the selected record screen. Upon completion of the operation, Access Data responds with the message:

* Record Deleted

NOTE: IF A RECORD IS ACCIDENTALLY DELETED, THE USER CAN IMMEDIATELY REINSTATE IT USING THE ENTER COMMAND.

Oneliner Screen Delete; To delete records in the Oneliner mode

- * Place a D or X next to each record you wish to delete.
- * Move the cursor to the home position.
- * Press [RET].

If a D is placed next to a record, that record will be Deleted. If an X is placed next to a record, that record will be Printed and then Deleted. You can use a D on one or more records and an X on other records at the same time. You can even add a P for Print Record, if necessary (see Print Operations below).

[E] The Enter Operation

The Enter Operation can be activated by pressing [ACT] with an E entered in the home position and the cursor positioned in the data block area or by typing a E from anywhere on the screen. Entering records can be accomplished by:

The Enter operation is a transaction, and it causes an application's PL program, if it exists, to be executed. After the execution of the PL program, the data is added to the application's data file and indexes are created so the record can be found the next time an appropriate Find operation is performed. Upon completion of the Enter Operation, Access Data responds with the message:

* Record Entered

The ability to enter records may be secured by using User Security levels and application Enter Security.

[F] The Find Operation

The Find Operation can be activated by pressing [ACT] with an F entered in the home position and the cursor positioned in the record or by using a `F from anywhere on the screen. When the Find command is executed, Access Data goes into a searching mode looking for records whose data matches the specified selection criteria (see Setting Selection Criteria, below). If the search Finds a single record that exactly matches the specified criteria, Access Data exits the search mode and displays the record in the Full Screen display mode. If a PL program exists for this application and it contains a reference to the Find Operation, the PL program is executed prior to the data display. If the search does not Find an exact match, the Oneliner Screen display mode is activated and displays the found records. The operator must then control the search by moving from page to page on the Oneliner Screen and selecting the desired record.

After a record is selected and before the data is displayed, all of the record's PL code for OPER('F') is executed. The searching process may be ended at any time by pressing [ESC]. The Find operation may be secured using User Security Levels and application Find security. Searching TEAM-UP's innovative Query-By-Example can be learned in minutes. Simply move the cursor to the item which contains the data in question, type the known information and let Access Data Find the records.

For example, enter the CUSTOMER application, move the cursor to the Key Item State, type FL and press [RET]. Access Data enters the Oneliner mode and displays all customers in the state of Florida.

Specifying the Order of the Search; Always place selection criteria in at least one Key item. If this is not done, TEAM-UP will assume the first key item positioned on the screen as the valid sequence for the search and tells Access Data the display order. To help the operator remember which items are Key Items, Key Item names may be displayed using a unique attribute, e.g. Reverse Video. If information is placed in more than one Key Item, THE ORDER OF THE SEARCH WILL BE BY THE LAST KEY ITEM WHICH CONTAINS SEARCH DATA!!!

EXAMPLE: If the selection criteria JAC is placed in the Key Item City, then only those records where the city name begins with JAC are examined to see if they meet the other selection criteria.

The application might contain 10,000 records, but if only 3 of them contain cities that started with JAC, Access Data will only examine 3 records for a match. If you type a space followed by AC, e.g., "AC" in the City Key Item, all 10,000 records will be examined.

To search for information which has no relationship to a Key Item, type a space, which is a "global" selection criteria, in any Key Item. All records in the application are searched in

order by that Key Item. Placing a space in one Key Item, with no other selection criteria present, allows searching through all records in an application.

<u>SettiSelectionon Criteria</u>; During a Find Operation, information displayed in the first 100 item data areas is treated as selection criteria. That is, only those records which contain information that exactly matches the data on the screen are found and displayed. Items 101 through 1000 require special qualifiers (see Special Search Qualifiers, below). The letter case of the selection criteria does not matter; i.e. A=a, B=b. You may enter selection criteria into as many item data areas as necessary for the search to be qualified. Unless special action is taken, the comparison between selection criteria and record data is an equal comparison.

- * Character data is compared on a character by character basis from left to right.
- * Numeric data is compared by the numeric value rather than their placement within the item.

[Q] Special Search Qualifiers

Within Access Data, nine Special Search Qualifiers or relational operators are available for use in finding records. Any single search may use Special Search Qualifiers on up to 50 different data items. EQ, equal to, is the default value with the following other qualifiers available:

GE greater than or equal to

LE less than or equal to

LT less than

NE not equal to MP match phrase (alphabetic data only)

NL null NN not null

To invoke a Special Search Qualifier Operation on a particular item, move the cursor to that item's data area and press \hat{Q} . Each time you press \hat{Q} , a different highlighted qualifier is displayed on the message line at the bottom of the screen. You may toggle or rotate through all nine qualifiers by repeatedly pressing \hat{Q} . The last qualifier displayed for an item is the one that is used when the Find Operation is activated.

To initiate a search using Special Search Qualifier Operations:

- * Use ^Q to toggle to the desired search qualifier.
- * Type your selection criteria.
- * Enter any other selection criteria and activate the Find command.

If the record or records searched for exist and a single exact match is not found, Oneliners are displayed matching the selection criteria with the Special Search Qualifier. Incorrect individual search qualifiers may be corrected by:

- * Moving the cursor to the item which contains the incorrect qualifier.
- * Press ^Q to toggle to the correct qualifier.
- * Re-initiate the Find.

Multiple searches with minor variations in the criteria and qualifiers may also be initiated using this method. Special Search Qualifiers may be used in conjunction with the Alternate Oneliner Screen and Oneliner Totals. Clear the application form to erase selection criteria and Special Search Qualifiers.

[T] Totaling Numeric Items

The contents of up to 20 numeric and/or money items may be summed during a search operation. The result is displayed only on the Oneliner or Alternate Oneliner screen and that result reflects the contents of all records examined since the beginning of the search. Totals are cumulative from one oneliner screen to the next.

To identify the items from which summations should be generated:

* Place the cursor in the desired item.
* Press ^T.

The highlighted word TOTAL appears on the Message line only if that item is a numeric or money item.

To activate a summation search process:

- * Identify the items you wish to have totaled with the ^T.
- * Enter the selection criteria.
- * Initiate a find operation.

The items identified for summation with the associated Totals are displayed on the bottom of the Oneliner screen, though the items themselves need not appear on the oneliner. A total can be run on virtually any numeric item contained within the first 100 items. The sum reflects the data contained in each of the records displayed to the Oneliner screen during this search, i.e. the Totals displayed at the bottom of the subsequent screens include all Totals for the records from the preceding screens. In this manner, a running total for the search is displayed on each screen. Oneliner Totals take precedence over the display of Oneliners; therefore, if you request 20 totals and the Oneliner screen is set to display 20 records, only 10 oneliners are actually displayed to make room for the 10 lines of Totals. To remove an item from the summation process:

T adds an item to the summation process if it is not already in that process and removes it if it is. To clear the entire summation process:

NOTE: While in the Oneliner mode, moving backwards, i.e. [PAGE UP], through the Oneliner screens, turns off the Total operation.

Oneliner Totals may be used in conjunction with Special Search Qualifiers and Alternate Oneliner Screens.

The Oneliner Operations

Changing the number of records displayed on a Oneliner Screen:

- * Move the cursor to the home position.
- * Type the letter O for Oneliner, followed by a [SPCE], followed by the number of records you wish to display on each Oneliner screen.
- * Press the [ACT] key.

EXAMPLE: O 20- causes a maximum of 20 records to be displayed on the Oneliner screen.

05- causes a maximum of 5 records to be displayed on the Oneliner screen.

00- causes the Full Screen to be displayed in the Oneliner mode. [PAGE UP] and [PAGE DOWN] can be used to scroll from record to record.

[O] Alternate Oneliner Screen

The Alternate Oneliner Screen is available for use, but has no predefined form. Once the Oneliner Display is defined for an application, that definition remains in effect until it is temporarily modified by the Alternate Oneliner Process. This process is activated by pressing 'O with the cursor on an item. Continue to press 'O for each item desired on the Alternate Display. The items will be presented, from left to right, according to selection sequence. Remember the maximum character display is restricted to 73 characters; however, you may make changes to the Alternate Oneliner screen whenever you desire.

Define the Alternate Items on the Oneliner Display

Alternate Oneliner definitions must be accomplished while in the Full Screen display mode. To define the Alternate Oneliner screen:

- * Move the cursor to the data item you wish to see on the Alternate Oneliner screen.
- * Press O for Oneliner to add that item to the Alternate screen.

The highlighted word ONE displays on the Message line to indicate that this item is on the Alternate Oneliner screen. To remove an item from the Alternate Oneliner screen:

Any change to the Alternate Oneliner screen automatically sets that screen version for the next search operation. Alternate Oneliner Screens may be used in conjunction with Special Search Qualifiers and Oneliner Totals.

Switch to Alternate Oneliner Screen

While in the Oneliner screen, press [^O] to change the screen display from the Standard Oneliner screen to the Alternate Oneliner form.

Switch to Standard Oneliner Screen

While in the Oneliner screen, press [^O] to change the screen display from the Alternate Oneliner screen to the Standard Oneliner form.

Record Zoom-UP and Return

TEAM-UP provides a Special Zoom-Up feature to display the full page of a record while remaining in the Oneliner mode. To activate a Record Zoom-UP:

- * Initiate a Find Operation to produce oneliners.
- * Place the cursor beside the desired oneliner record and press the [ACT] or [END] key.

The full record will Zoom-UP for display. An operator has all functions available (enter, update, delete, etc), with one addition. When processing of the selected record is completed, the [END] key will return the operator to the same Oneliner Screen to continue with his work.

[P] The Print Operations

The Print Operation can be performed from either the Full Screen mode or the Oneliner mode. The ability to use a Print Operation can be secured using User Security Levels and Application Print Security.

Full Screen Print

<u>Print to a Local Printer</u>; The Print command can be activated by pressing [ACT] with a P entered in the home position and the cursor positioned in the data block of the screen or by typing a ^P from anywhere on the screen.

Print to a Spooled Printer; In multi-user systems, many users make use of the same printer. Such systems have a network program usually referred to as a Spooler. The Spooler accepts print requests from each user and places the data in a special file, one file for each user. These special files are called spool files. From there, another program actually prints the information contained in the spool files, one file at a time, to the printer. If your network has more than one printer on line, the user may choose the printer by returning to the home position and entering:

* P [space] Printer #

To determine the printer number, refer to the INSTEAM program TEAM-UP expects the spooler program to be active. To despool, press {HOME], enter a 'P' in the command area and [ACT]. The print spool file is held active and not printed until:

- * A Print command is issued entering [HOME] P [ACT],
- * A new printer is selected, [HOME] P{space} PRINTER# or
- * You exit Access Data.

Oneliner Print

In the Oneliner Mode:

- * Place a P, O or X next to each record you wish to print.
- * Move the cursor to the home position.
- * Press [ACT].

If you place a P next to a record, that record will be printed. If you place an O next to the record, that oneliner will be printed. If you place an X next to a record, that record will be printed and then deleted. You may use a P on one or more records and an X on other records at the same time. You can even use a D for Delete Record if necessary.

[R] The Report Operation

The Report Operation is a combination of the Find and the Print operations and is used for Ad-hoc reporting. Access Data reports are displayed in whichever Oneliner screen mode is active--Standard, Alternate or Full Screen. They can be sent to the screen or to the screen and to the printer. During a Report Operation, you may not select a record for further processing. A Report Operation can be stopped at any time by pressing [ESC].

Report to the Screen

- * Select the appropriate Oneliner mode.
- * Enter the desired selection criteria.
- * Activate the report with a ^R or by pressing [ACT] with an R entered in the HOME position of the Command area and the cursor placed in the data block of the screen.

NOTE: If the Alternate Oneliner mode is active, records will be printed in that display format. Otherwise, the Standard Oneliner format will be used. If the number of oneliners to display is set to zero, the report function will present full screens of each *record*.

During the Report process, if you desire to temporarily stop the display, press the space bar. The display stops and holds until you press another key. If Totals for numeric items are defined, those Totals are displayed for the Report. If the number of records displayed on the Oneliner screen is greater than zero, then the report is displayed in either the Alternate or Standard Oneliner screen format. If the wrong format is displayed, use ^O to change it. If the number of records displayed on the Oneliner screen is set to zero, then a Full Screen is

displayed. In multi-page applications, the page from which the Report was initiated is displayed.

Report to the Printer/Spooler

The Report to the Printer/Spooler is very similar to the Report to Screen operation. It is activated by:

- * Placing an underscore in the second position of the command area following the R.
- * Activating a Report Operation by pressing [ACT] with the cursor positioned in the data block.

Information will be sent to both the printer/spooler and to the screen.

[U] The Update Operation

To use the Update Operation:

- * Select the record you wish to change.
- * Make the appropriate changes on the screen.
- * Activate the command with a ^U or by placing a U in the home position, positioning the cursor in the data block and pressing [ACT].

If Audit Security is activated, then the old copy of the selected record is marked as inactive, its indexes are removed, the data remains in the file for audit purposes and a new record is Entered. These inactive records can be removed with the Remove Records function. This operation is a transaction and it activates whatever Procedural Language programs exist for the application. The ability to use the Update Operation maybe secured using User Security Levels and application Update security.

IMPORTANT TECHNICAL NOTES: The TEAM-UP UPDATE command is performed in three steps:

- * A record's keys are removed from the Index (.TIR) file.
- * The data is "overlaid" into the data file (.TDR) where the original record was located.
- * The key items are reinserted into the .TIR in their proper positions.

Exit Access Data

Place the cursor in the home position on the Full Screen and press [ESC]. The Application List is displayed. You may also type a menu path at the home position and press [ACT].

Text Editor

The Text Editor is a full page text editor used primarily to create and change text files. Upon entry to Text Editor, the screen displays a menu of eight options:

To select an option, use the [ARROW], [TAB], etc., keys to highlight the desired selection and confirm your selection with [RET] or type the first letter of the option name.

Load

The Load option retrieves a file of text from the disk and then activates the Edit process.

<u>Identify</u> the File to Edit

Upon selection of the Load option, enter the name of the text file to be edited. To identify the file, enter the following in the same format as it is found in the operating system (e.g. D: TEXT.DOC).

- * drive (if other than the default drive)
- * file name
- * file extension, if needed

If the file does not exist, a new file is created. If the file exists, the entire file is brought into the text editor unless the file is too large. If the file is too large, an error message is sent to the screen and the process is aborted.

The drive is assumed to be a TEAM-UP drive location. However, if the drive or file name contains a "\" symbol, an operating system path name undefined within TEAM-UP is assumed.

C:\WP\TEXT.DOC specifies that the file TEXT.DOC should be loaded from the word processor on the C drive--the location C:\WP need not be described in the TEAM-UP path file.

LOAD allows the user to change the name of the file currently being edited. Selecting LOAD after making changes will generate a prompt for file name change. Enter the new file name and SAVE or EXIT.

Exit

The Exit option saves all changes made to the current text stored on disk under the same file name as was used during the most recent Load operation and then displays the Design Applications Menu.

Save

The Save option enables the operator to save all changes to a file without exiting the Text Editor. Changes made to a file are not permanent until either the Exit or Save option has been exercised. During a long edit session, the Save option should be used periodically to ensure that a power failure does not cause significant loss of work. After editing a file, a backup copy with the extension of .BAK is created and preserves the file in its pre-edited condition.

Quit

The Quit option does not save the changed data before the Design Applications Menu is displayed. All changes will be lost.

Find

The Find option will search through the text file from the cursor to the end of the file to find every occurrence of the search criteria. The Find option first prompts the operator for the criteria. The next prompt specifies between lower and upper case. The cursor will then move to the end of the first occurrence of the text specified, relative to the cursor position in the file. If the cursor was in the home position, all occurrences of the text will be found. If the cursor was in the middle of the text, all occurrences from the middle to the end of the text will be found. To move from one occurrence to the next occurrence within the text, press [^F].

Replace

The Replace option works like the Find option except the operator can replace the text found with other text. The operator is prompted for the text to replace the original text with. The following options are available:

Printer

The Printer option allows the user to select which printer is to receive the output. This option also tells TEAM-UP to despool if your station is connected to a spooled printer.

DOS

The DOS option allows the user to exit TEAM-UP, execute DOS commands and then return to the Text Editor by typing EXIT.

operation of the Editor

The Text Editor is a general purpose, page-oriented text editor with a text capacity of 30,000 characters. The following sections define its use.

Movement from Page to Page

- * Use the [PG UP] key to move to the preceding page. If you are on the first page of the text file, the [PG UP] key has no effect.
- * Use the [PG DN] key to move to the next page. If you are on the last page of the text file, the [PG DN] key has no effect.
- * Use the [DEL LINE] key to delete a line.
- * Use the [INS LINE] key to insert a line.

Cursor Movement within a Page

- * The [SPCE] and [SPCE] keys move the cursor one position to either the right or left; however, it also erases the character that was under the cursor at the beginning of the move.
- * The [RET] key breaks the line at the cursor location and moves the cursor and any data under or to the right of it to the beginning of the next line.
- * The [ARROW] keys move the cursor around the screen one character at a time. No information is erased.
- * The [TAB] and [TAB] keys move the cursor five character positions to the right or left as appropriate. No information is erased.
- * The [HOME] key moves the cursor to the beginning of the first line of text in the document.
- * The [END] key moves the cursor to the end of the last line in the document.
- * The [BEG LINE] key moves the cursor to the beginning of data on the current cursor line.
- * The [END LINE] key moves the cursor to the end of data on the current cursor line.

Data Insert Mode

The [INS] key activates the Insert mode if it is deactivated and deactivates the Insert mode if it is activated. The word INSERT appears on the top of the screen when the Insert mode is activated.

When the Insert mode is activated, typing a character causes all characters under and to the right of the cursor to move right to make room for the new character typed.

When the Insert mode is deactivated, typing a character replaces the character under the cursor with the new entry.

The [LINE INS] key inserts a blank line at the cursor location.

Delete Text

- * The [DEL] key deletes the character under the cursor' and moves all text tO the right of the cursor to the left one character position.
- * The [LINE DEL] key deletes the entire line on which the cursor is positioned.
- * The [DEL EOL] key deletes from the cursor to the end of the line.

Print Text

To get a hard copy print of a block of text, place the cursor at the beginning of the desired block. Press the [^P] key. Move the cursor to the end of the desired block and press [^P] again. The text will go to the currently selected printer. This device could be a local printer or a spooled printer on a multi-user system.

NOTE: Use of the text print capability causes the operating system to lock. up if the currently selected printer is not active.

For example, if on a single user system you do not have a printer hooked to your computer, your computer will "lock up". If this occurs, wait for the prompt to Abort, Retry or Ignore. Choosing Ignore will tell TEAM-UP not to print the text.

copy Text

To Copy a block of text, place the cursor at the beginning of the desired block. Press the [CPY BLCK] key. Move the cursor to the end of the desired block and press [CPY BLACK] again. This process makes an exact duplicate of the data in a special buffer. "

Move the cursor to where you wish the copied data to reside and press the [CPY BUF] key. The data in the special buffer is inserted at the cursor location.

NOTE: Any Move or Copy operation changes the data stored in the special buffer. When a new file is loaded, the contents of this special buffer are not disturbed, allowing you to copy text from file to file.

Move Data

The Move Data operation is similar to the Copy Data operation except that you use the [MVE BLCK] key instead of the [CPY BLCK] key. The second time the [MVE BLCK] key is pressed, the identified data is copied to the special buffer and erased from its original position on the screen.

Undo the Previous Command

Pressing [UNDO] will cancel any changes made to the current line. Once you leave the line, however, your changes are saved and cannot be undone. Your changes are not saved to the disk until you use the SAVE or EXIT commands. If this has not been done, you may reLOAD the current file without the changes.

Pulldown Item Names

The Text Editor has the ability to provide the item names of any TEAM-UP application. To use this aid, place the cursor after the item name and period and press [HLP]. Select the desired item name by using the arrows and [RET]. [ESC] will not select an item name. If the cursor was on a different item name, that name will be replaced with the one selected.

Enter Command Mode

Pressing [ESC] from the edit screen will place the user in the command mode.

Enter Edit Mode

Pressing [ESC] from the command mode will place the user in the edit mode.

Report Data

Definition of a Report

A report is defined as an account of something seen, done or studied. Reports generated within TEAM-UP compile and account for all information stored in the application items tagged by the report's designer as being pertinent to the current topic.

Reports have an infinite number of formats. Resumes, letters, invoices and inventory lists are all reports and they all have one thing in common. They state facts. To introduce you to the basic components of a report, the following paragraphs will dissect a resume and label its parts.

In our example, a designer is preparing a resume for a specific job. He includes all available information that will make the resume informative and concise. He also formats the resume in whatever fashion will make it the most attractive and the easiest to read.

The resume's writer will place his name, address and telephone number at the top of the first page of his resume. This area is known as a Report Header and it contains the topic of discussion. All information contained within the resume or report consists of Report Bodies.

The major sections of the resume could be entitled Education, Desired Occupation and Employment History. Report Data refers to these titles as Sub Report Breakpoints. The text beneath them is known as a Report. Each paragraph constitutes a Data Block. Summary paragraphs at the end of each section are known as Report Summaries.

```
JOHN DOE'S RESUME (Report Header)

DOE, JOHN (Page Header)

EDUCATION
(Report Breakpoint)

(Data Block)

Desired Occupation
(Report Breakpoint)

TOTAL YEARS EXPERIENCE = 21.2
(Formula, Summation)

In conclusion,...
(Report Summary)

As a close to my resume,...
(Report Summary)
```

Each data block within the report is X number of lines in depth and X numbers of characters in width. The depth and width of the data block constitute its parameters.

The information contained within each data block is chosen by the designer based upon Selection Criteria. The order in which the data is listed, e.g. from year to year, is the data's Sort Order.

If the designer wishes to add the number of years spent working in one discipline, such as engineering, he may perform a Summation or create a Formula. Each previous job will be reviewed, and all years spent in engineering will be summed. The total could be inserted in the Sub Report Summary under the Sub Report Breakpoint entitled Employment History.

A Page Header containing the designer's name or other information may be placed at the top of a page. Page Summaries can contain information such as page numbers or running totals. Page Summaries will appear at the bottom of the page.

Remember, the italicized words given in the previous paragraphs are the key words used in the report generation process.

Report Data - An Overview

The TEAMUP Reporter allows the user to create either simple or complex, multi-level reports. The creation process is consistent with TEAM-UP's menu prompted philosophy. Reports may be generated to a screen, a printer or a file. Report designs can be created, changed, evaluated or removed (deleted) as user needs dictate.

Optional operator responses at the time of report execution allow variable input for record selection without requiring expertise on the part of the operator.

Reports designed for a specific application are not restricted to the data contained in that application. Up to nine (9) other data bases can be involved to accommodate data sharing and record updating.

TEAM-UP's reporter has many special features. "Windows" allow the operator to check item spelling, printer attributes and formulas for special calculations. Operators can take advantage of the ability to condition output in the same printed position via the "If" statement.

The basic philosophy behind the Report Generator is the presentation of data in a preformatted and orderly manner. Headings, dates, page numbering, sub-totals, labels, summary totals, etc., may be used to provide continuity. This data is the result of all activity occurring within Access Data. These records are simply retrieved, manipulated and printed by the reporter. Of course, "printing" is not the only option. TEAM-UP provides screen display reports and reporting to disk files in ASCII format, with or without delimited characters. This data can be exported to other software packages for use in spread sheets or use in mail-merge processes.

Accessing Report Data

To access Report Data, choose menu selection number 2 on the Data Manager Menu or use the dot-pathing method (1.2) from anywhere in Data Manager. The user is greeted upon entry with the applications fist and a prompt for an Application name. Only those applications authorized by Security are shown.

The system displays the names of all reports currently defined for that application after application selection. These 16 reports (.TRO through .TRF) are tracked by TEAM-UP's Control File. This limit is NOT a limit on the number of reports any given application can have. It is the limit on those which can be tracked by TEAM-UP's Report Data module. To access a report not tracked by TEAM-UP, you must know the name of the file in which the report definition is stored. When prompted for the report, enter the file name with its three character extension. The Reporter will validate the file as a report and continue. If the file does not exist, a new report will be created with the currently selected application as the major application. Any report can be accessed in this manner, even reports for other applications.

To select the report, highlight the report name or type the report name at the prompt. Press [RET] to confirm the selection.

Report Operations Menu

Report Operations are performed after selecting a report. The above screen is presented if a selected report already exists. If you are creating a new report, see this section - Report Design.

Select a Report Menu option by highlighting the desired option or by typing the first letter of the menu option (G, D, E, P or R) at the selection prompt. Confirm the choice by pressing [RET]J. Press [RET] again to initiate the default value of Yes or No shown.

The Evaluate (E) option has two additional confirmation prompts:

- (A) Evaluates all reports for an application
- (S) Evaluates all reports in the system

G - Generate

Once the choice to generate (execute) a report is confirmed, TEAM-UP checks:

- * If the user security is less than the Print security in the main application, the system will not allow report generation.
- * If the user security is less than this report's internal report generation security (Design, Miscellaneous Parameters, Set Security later in this section), the system will not allow report generation. This security additionally limits users who may have

application Print security but whose security level is below the generation security level from executing this report.

* If any application from which the report draws data has changed, you are told that an Evaluate is necessary and the report list is re-displayed.

If System Security permits access and the selected report does not require evaluation, the following message may be displayed:

* Where do you wish the report (S =screen, P=printer, F=file) [S]

The system has the value S in brackets as a default. Pressing [RET] tells the system to send the report to the SCREEN. If you type P, the report is sent to the PRINTER.

NOTE: If a printer is not associated with the terminal, the system will pause as DOS waits for the printer. Data loss will NOT occur.

Typing F sends the report to a FILE. With this option, the system prompts for a file name to which the report can be written. YOU MUST USE A FILE NAME THAT IS NOT ALREADY IN EXISTENCE. Also, you can specify the drive and DOS path if you want the file placed somewhere other than on the default drive. Precede the file name with the drive designator followed by a colon, e.g. drive: \path\filename.

You may enclose non-numeric items in quotes and insert a comma after all but the last item of a line. This is useful in creating delimited files for Basic programs, Mail Merge processes or Spreadsheets. Two or more delimited files can be joined and imported through the Import Data module to create new applications. Respond to the prompt according to your output requirements.

If the report you are generating has multiple sort items defined, an extra file sort is required before the report can be generated. The following message maybe displayed:

* On which drive should temporary sort files be placed: [@]

The @ in brackets indicates the default drive. If you wish to place the temporary sort files on other than the default drive, type the TEAM-UP drive letter at the prompt.

NOTE: You may only use drives that are defined in the .PTH (path) file,

If the first sort item defined for the Report Order is a key item and its sort sequence is ascending, the following message may be displayed:

* Enter start key value for key ITEM NAME:

Type the lowest key value for which data is to be included in the report. The wording may be changed when generating the report. How to do this will be discussed later in this section.

EXAMPLE: If your key item is Zip_Code and you type a value of 20000, your report will include only those records whose zip code is equal to or greater than 20000. If your key item is State and you type an N, your report will start with those records whose state name begins with N.

After answering this question, another prompt may be displayed:

* Enter stop key value for key ITEM NAME:

Type the highest key value for which data is to be included in the report. Given the previous example, a value of T will cause all records with a State value of N through T to be included in the report.

NOTE: Start and stop values take precedence over Record Selection criteria (defined in this section under Report Design, A :cord Selection).

If a [RET] is pressed without an entry for start value, records are included starting with the first record in the file. If a [RET] is pressed without an entry for the stop value, records are included beginning with the selected start value and ending with the last record in the file. To include all records in the file, press [RET] at the start and stop value prompts.

At this point, all User Prompts are answered. If prompts were defined for the report in the Record Selection portion of Report Design, you will be asked to enter a value. The system begins the report generation process after all prompts are answered. Messages pertaining to record selection and sort functions appear on the screen. Upon completion, the report will be sent to the chosen destination.

Reports sent to the screen will be displayed one screen at a time. Pressing any key continues the display. At the end of the report; the following message will appear:

* Report generation complete, [RET] to continue

Pressing [RET] takes you back to the Application Report List screen.

D - Design

Reports must be created or changed when an application is changed or when data content or formatting become obsolete. If the user security is less than this report's internal report change security, the system will not allow report changes (see this section - Design, Miscellaneous Parameters, Set Security). After clearing security and selecting Design, TEAM-UP will load the Report Design module for the selected report. This process is discussed at length later on in this section under Design.

E - Evaluate

A report is automatically evaluated when created or when certain changes are made. The evaluation process checks each part of the report to be sure that the report will be able to

perform all operations correctly and locate all data. It does not check the validity of the user's data. When applications that are accessed by a report are changed, it is necessary to re-Evaluate the report.

When you generate a report, TEAM-UP automatically detects changes and displays a message directing you to Evaluate that report. In most cases, Evaluation will permit the generation of a report. However, any fatal errors will have to be corrected before the report can be generated.

P - Print Summmy

This menu selection produces a detailed summary of the report description. The Print Summary is self-explanatory. The summary maybe output to a screen or a printer. You may include a description of each item in each block.

R - Remove Reports

The Remove option allows you to delete reports. If the user security is less than this report's internal report change security, the system will not allow report removal. If your user security allows you to remove this report, you are asked for confirmation of the Remove option. By typing [Y] [RET], all references to the report and the associated report file will be removed from the system.

Creating New Reports

Type the name of the report you wish to create at the prompt for report name and press [RET]. The name can be a maximum of sixteen (16) characters in length, including spaces, but it must be unique to this application.

After entering the report name, you are given the option of copying an existing report form. Enter [E] for an existing report. This report form may be used as the basis for creating the new report. If an appropriate format does not exist, enter [N] for a new report form. By selecting a new [N] report form, you will create the report from scratch. Enter a text description of the report. You may describe the report, using a maximum of 110 characters, or leave the description blank and continue by pressing the [RET] key. If the new report is being defined from an existing report, select the model from the above list of reports. Use the [ARROW] keys to highlight the desired report and [RET].

The Report Design Module is then loaded to allow processing report definitions.

Design Menu

The Report Design Menu is the vehicle through which you design new reports or change the attributes of existing reports. This menu appears as the result of preliminary activities described on the previous pages.

The Report Design Menu is divided into four major sections:

- * RFPORT CONTROL
- * PRINT DESCRIPTION
- * SUM REPORT DESCRIPTION
- * MISCELLANEOUS

Report Control

Menu selections within this section allow you to define the criteria necessary to sort and select the data You wish to report. You may also edit the relationships established between the main and related applications used in the report.

Application: APP NANE	REPORT (ORDER	Report:	REPORT	NAME
CURRENT	LEN ORD	()LD	LEN	ORD
undefi ned 1 undefi ned 3 - undefi ned undefi ned undefi ned 4 - undefi ned 6 - undefi ned 7 - undefi ned 8 - undefi ned 9 - undefi ned		1 3- 4 - 7 - 8- 9-	undefi ned undefi ned undefi ned undefi ned undefi ned undefi ned undefi ned undefi ned		

Enter desired process:

A-Add, C= Change, D=Del Ete, [ESC]=exit

1- Report Order

Report Data Selection #1, Report Order, allows you to determine the sequence (ascending or descending) in which the data will be presented when the report is generated. The items defined as sort items need not be key items. Up to nine sort items can be chosen and each item may have a total length of up to 110 characters. If the total length exceeds 110 characters, only the first 110 characters are sorted and the remaining characters are truncated.

No file sort is needed if only one sort item is selected, and it is a key item to be sorted in ascending order. If no sort-items are defined, the report is presented in ascending order by the first key defined for the main application.

An extra file sort is required if any one of the following conditions are true:

- * more than one sort item is defined
- * the key item is to be sorted in descending order
- * the single sort item is not a key item

If any of the above conditions are true, the following message is displayed:

* Report requires file sort

File sorts require extra time and disk space because temporary files are created during report generation. The order in which the sort items are defined is important. Sort item number 1 is the first item sorted. It is the priority item. Items are sorted in order until the sort is completed. When multiple items are sorted, the file sorting process is quicker if the first item specified is a key item sorted in ascending order.

Enter your sort items on the Report Order screen. Enter the length or number of characters from left to right and the order (ascending or descending) that the item(s) are to be sorted.

The screen is divided into two sections. The left section shows the CURRENTLY defined items, while the right side shows the previous sort definition. The right side is used to facilitate "temporary" report changes. Copy the information from the right side to the left side if you wish to reinstate the prior sort order.

During the sort definition process, you can (A)dd, (C)hange and (D)elete sort items. To begin the definition process, type the letter corresponding to the process you wish to initiate.

Add Sort Items

If Add is selected, the system prompts for the Application item name. The application name is already displayed. If this application contains the item you wish to sort, type the item name exactly as it appears in the application or press [HLP] to window the application's items. Windowed items are selected by highlighting the item of choice via the [ARROW] keys, pressing [RET] to select it and pressing [RET] to confirm your decision.

If the item is in a related application, you must change the default application name by overtyping the related application name, followed by a period. Type the item name directly after the period or use the windowing technique as described above.

Once a valid item name is entered, the system prompts for the number of characters for this item to use in the sort. At the prompt, type the numeric value if it is different from the default value contained in brackets. The default is the total length of that item as defined by the application. If a value less than the total length can be used to sort, enter the length of the significant characters. Using a value less than the total value reduces the amount of space taken by the temporary sort files. A value of zero will not sort data.

Sorting on a value of zero allows the user to utilize start/stop key prompts without actually sorting on that item. After entering the sort length, choose the sort order. Enter either an A for ascending or a D for descending. The default value is ascending order.

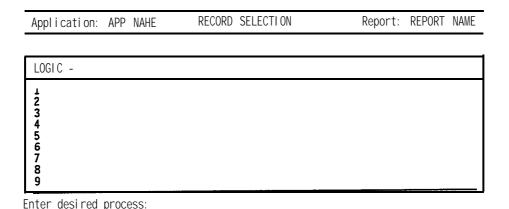
Change Sort Items

The Change option is similar to the Add option; however, you are prompted for the number of the sort item to be changed. Enter the number corresponding to the sort item to be changed or press [RET] to choose the default number displayed. men a sort item is changed, the left block displays the new sort item and the right block displays the sort item before it was changed.

Delete Sort Items

Choosing the Delete option displays a prompt for the number of the sort item to be deleted. Enter the number corresponding to the desired sort item to be deleted or press [RET] to choose the default number displayd. If there is only one sort item, the left block will be empty and the right block will contain the sort item that was deleted. If more than one sort item is defined, as sort items are deleted, the remaining sort items move up in order of priority.

2- Record Selection



A=Add, C= Change, D= Delete, [ESC]=exit

Selection #2, Record Selection, is used to choose the application records for the report. This is done by specifying conditions and criteria under which a record should be included. Selection criteria are used to limit the amount of information included in the report.

You may specify up to nine sets of conditions. The format of a condition can be any one of the following:

- * a data item compared to a character (Literal) string
- * a data item compared to a data item (Data value)
- * a data item compared to a Formula
- * a data item compared to a User Prompt
- * a data item compared to a String Memory Variable

* a data item examined for the occurrence of a given character string (MP - Match Phrase) anywhere within the item.

Possible conditional operators are:

EQ = equal LE = less than or equal GE = greater than or equal

NE = not equal LT = less than GT = greater than

MP = match phrase

Comparisons are character by character matching for the number of characters in the shortest item or character string for alphabetic data types.

After the initial conditions have been defined, the second line on the screen shows the Logical relationship of the conditions defined (Logic Line).

Operand 1	Operator	Operand 2
1 CUST.Zip 2 CUST.Zip	EQ GT	OLDCUST.Zip 50000
3 CUST.State	NE	New York
4 CUST.Contrac	et MP	Expired

The available options for defining Record Selection criteria are:

A . . . to ADD a condition,

C ... to CHANGE an already defined condition or

D . . . to DELETE a condition.

Add... Selection Criteria

If you select A for ADD, the system checks to see if this is the first condition defined. If it is not the first condition, you are prompted for a logical operator. The logical operators are AND and OR. These conditions are represented within the Logic Line as the following symbols:

$$\&=$$
 AND $!=$ OR

Logical operators are used to define the relationship between a new condition and all preceding conditions. Logical operators have equal priority and are scanned from left to right. The priority is altered by the use of parentheses. Press the [INS] key to use the Insert mode to position the cursor in the Logic Line. Add punctuation, numbered conditions and/or delete where needed. See Edit Selection Criteria later in this section for more details.

Next, identify the data type you wish to use for the first operand of the condition. The possible selections are:

L = LITERAL string of data

E = DATA VALUE or application data item

F = FORMULA

P = USER PROMPT which is a reporter request to the operator at the time of report execution

v = STRING MEMORY VARIABLE value using the SMV(x,y) form

Most often, the first operand will be the contents of an application item, and the system will default with type [E] or Data Value. If this choice is consistent with the condition being established, press [RET] to accept the default. If not, enter the appropriate letter and press [RET].

A data type E requires the item name for the application from which records are to be selected. The prompt:

* Enter APPLICATION. Item name - CUST.

contains the application name of the main application followed by a period. Enter the item name. If the record selection takes place from a related application, backspace over the application name and enter the correct name.

If you use an application other than the main application and that application has not been previously defined for this report, the system prompts for a definition of its relationship to known applications (see Edit Relationships in this section).

The "pull down" item name feature can be used for selecting items from the main application or any other application for which the Edit relationship has been established. You can utilize the "pull down" item name feature by pressing the assigned [HLP] key (see Special Features further on in this section). If the data type is not E, i.e. L, F, P or V, see below.

After the first operand is entered, the system prompts for a relational operator such as:

 $\begin{array}{lll} EQ \; (\text{Equal}\,) & LE \; (Less \; than \; or \; Equal) \\ \text{NE} \; (\text{Not} \; Equal}) & LT \; (\text{Less} \; Than) & GT \; (Greater \; Than) \\ MT \; (Match-Phrase) & GT \; (Greater \; Than) & GT \; (Greater \; Than) \\ \end{array}$

Press [RET] to accept the default or type the appropriate letters followed by [RET]. Once the desired operator is entered, the prompt for entering the second operand is displayed. Enter the second operand in the same manner as the first operand. If the data type entered is an L, enter the string LITERAL (text) you wish compared to the other operand. This string can be up to 110 characters in length.

NOTE: Use L(iteral)s to compare null fields by typing an underscore as the value of the literal. For numeric comparisons, enter the number as the value of the literal.

If the data type entered is F, enter the FORMULA whose resultant will be compared to the other operand (see Formula Structures under Special Features in this section). If the data type entered is P, enter the string literal (text) which will be used to PROMPT the operator

when executing the report. User Prompts can be identified on the Record Selection screen as those literals beginning with a "?". (TEAM-UP inserts the question mark to differentiate between formulas, literals and prompts.)

The values resulting from the operator's response to the prompt can be printed anywhere in the report. The form of the referenced value is the letter "P" followed by # . . . for strictly numeric values or ! . . . for alphanumeric values.

NOTE: Any formatted item (date, time, phone, etc.) is considered an alphanunmeric value because the numeric data contains imbedded characters (1, :, -).

The # or ! symbol is followed by a numbered position (1 through 18) that the prompt occupies on the screen. The naming of these prompts is consistent with the layout of the record selection screen: left side (first operand), right side (second operand) and nine possible logic entries (2x 9 = 18). The number is determined by counting from top to bottom and left to right for each prompt. As a result, the value of the prompt can be used anywhere in the structure of the report and represented as a "formula" for computation or for printing.

If the data type entered is a V, the system will prompt for the starting location for the comparison data within the string memory VARIABLE. A second prompt will ask for the length of the data at that SMV location.

EXAMPLE: If SMV(1,8) contains a pre-determined date for processing reports listed on a menu, then record selection criteria in each report dependent upon this date would have an automatic variable entry for processing simply by virtue of the operator's report choice. The record selection would be made automatic without intervention or prompting at the time of report execution, allowing multiple report executions to occur without being prompted for the date.

Change Selection Criteria

If you select C for change, the first prompt requires identification of the condition being changed. Press [RET] to choose the default or enter the number of the condition you wish to change and press [RET]. The Change process is very similar to the Add process with the exception that the current values are shown after each prompt. Press [RET] to leave the current value unchanged. To change the value, over-type the displayed value and press [RET]. Use the [BKSPCE] key to erase unwanted data.

Delete Selection Criteria

If you select D for delete, the system prompts for the number of the condition to be deleted. Enter the number followed by [RET] to delete the condition.

Multiple selection Criteria

The following describes the way selection criteria are evaluated. The Reporter looks at each record and tests it against the selection criteria in order to decide which records will be included in the report.

Selection Criteria	Test Results
1 o r 2 1 and 2	If either of these conditions is true, record is selected. Both conditions must be true for the record to be selected.
1 0R 2 AND 3	1 =(true), 2 =(false), 3 =(true); then record is selected.
	1 =(false), 2=(true), 3 =(true); then record is selected. 1 =(true), 2=(true), 3 =(false); record NOT selected.
(1&2)!3	1 =(true), 2 =(true), 3 =(false); then record is selected. 1 =(false), 2 =(false), 3 =(true); then record is selected.
(1!2)&3	1 =(true), 2 =(true), 3 =(false); then record is NOT selected.

(The NOT (~) command is available for building selection criteria logic.)

Edit Selection Criteria

You can edit the Logic line, as it appears at the top of the screen, for the selection criteria defined. By using the [INS] key, the Logic line is brought to the lower portion of the screen for editing.

NOTE: The numbered criteria from 1 to 9 can be entered in any order. The logic used to determine record selection is based purely on the numbered items found in the Logic line. In fact, all nine criteria can contain some logical comparison. Yet, if not included in the logic line, that criteria item will NOT be considered when record selection is made.

The arrow keys can be used to move back and forth across the line. Over-type to change a logical operator. For additional editing, the [INS], [DEL] and [DEL EOL] (^Z) keys are also functional. You can insert parenthesis around conditions to change the priority of evaluation and to impose a specific order for selection. All operations contained within parenthesis are performed first; then operations not within parenthesis are performed to arrive at a final result.

To exit the edit Logic line session, press the [RET] key to record any changes and the new edited version of the logic line appears at the top of the screen. If you do not wish to save your changes, exit by pressing [ESC].

3- Edit Relationships

This selection allows you to change application relationships. Application relationships exist when data is "pulled" from another application and included with the main application data for which the report is written. Changes in an application's structure from time to time may dictate this type of alteration.

Application:	PROJSTAT I	EDI T	APPLI CATI ON	RELATI ONS	Report:	LOG PRINT
--------------	------------	-------	---------------	------------	---------	-----------

REMOTE	Rel Type	SOURCE	
1- RESULTS. TASK#	2	PROJSTAT. TASK#	
2- ASSTN. TASK#	2	PROJSTAT. TASK#	
3- HOLD. TASK#	0	PROJSTAT. TASK#	

Edit which relation, [ESC] to exit: [1]

If relationships were previously defined, the process will present a screen showing a list of nine possible entries. It shows the related application whose data is being pulled and the key item used for record retrieval. The main application item used to link the applications is also displayed. In the center of the window is the RELATION TYPE (Rel Type) which establishes any conditions pertaining to the link.

Enter the relationship number that you wish to change. Prompts are presented for operator response and are explained in detail in this section under Establishing Relationships Between Applications.

Print Description

This is the heart of TEAM-UP'S Report Data manager. Descriptions of report content and format are developed within this section.

Reports are composed of blocks of information. You may use these blocks in any combination you choose. Think of each block as a separate area that when pasted together makes a report page. Each block may be as wide as 250 columns and have-up to 99-lines. Those blocks which are utilized and contain defined data are presented upon report generation. If a block contains no data, it is not printed.

The seven Report Data blocks are as follows:

- (1) Report Header (2) Page Header
- (3) Sub-Report Breakpoint Header (4) Report Body
- (5) Sub-Report Breakpoint Summary (6) Page Summary
- ('7) Report Summary

The Sub-Report areas (3 and 5), in combination with the Report Body, are explained in more detail under Sub-Report Description.

You may use these blocks in various combinations. A simple report may Only Contain a Report Header block, followed by a Report Body block. On the other hand, complex reports

may be composed of a number of different Header blocks, a Report Body block and one or more Summary blocks.

The pre-defined processing and print order of each Report block is as seen above. The only exception involves the combination of Sub-Report Breakpoint Header, Report Body and the Sub-Report Breakpoint Summary. If a block is not used, Report Data simply processes the next block that contains defined data.

Printing Scenario

The Report Data module checks for selection criteria and required sorts upon report generation. Once these processes are completed the actual printing or writing to a file begins.

(1)... If a Report Header is defined, it is presented.

NOTE: This block can be created on the first page of the report or as a banner on every page.

- (2)... If a Page Header is defined, it is presented at the top of every page in the report.
- (3) . . . If a Sub-Report Breakpoint(s) is defined, all Sub-Report Breakpoint Headers will be presented on the first pass only. On subsequent changes in the breakpoint values, only the Breakpoint Header associated with the changed Breakpoint value will be presented, allowing multiple levels of "Sub-Reports" or subtotal group headers to be presented.
- (4)... If a Report Body is defined, then the body block will be presented for each record horn the application that is selected for processing.
- (5) . . . If a Sub-Report Breakpoint Summary is defined, only the Breakpoint Summary associated with a changed Breakpoint value will be presented to allow multiple levels of "Sub-Reports" or subtotal groups to be presented.

EXAMPLE: Blocks defined for (3), (4) and (5) above will continue to be processed until a new page is sensed. For example, if a department sales report is prepared to show each department and its assigned sales personnel, the department number could be defined as the breakpoint value. Whenever the department number changes (as records are processed) a "break" occurs in the value. The break is sensed by the reporter and the appropriate Breakpoint Summary is presented. When the Summary block is complete, the Breakpoint Header for the record which caused the break will be presented. Then, all Body blocks (each salesman) for the new department would be presented:

```
*********
               Report Header
               Page Header
Dept 1 ...
Slsm 1 ...
               Breakpoint Header
               Body
S1sm 2 ...
S1sm 3 ...
               Body
               Body
               Breakpoint Summary
Dept 1 ...
Dept 2 ...
Slsm 4 ...
               Breakpoint Header
               Body
Slsm 5
               Body
S1sm 6
               Body
               Breakpoint Summary
```

- (6) . . . If a Page Summary is defined and the report generator senses the end of the available print space (minus the amount of data contained in the Page Summary block), then the Page Summary block will be presented before moving to the next page of output.
- (7).** If a Report Summary is defined and all records selected for processing are read, the Report Summary block will be presented before ending the report.

NOTE: If NO Page Summary block is defined, the Report Summary will be presented immediately following the last Body or Breakpoint Summary block processed. If a Page Summary exists, then the Report Summary will be presented on the nextfile page.

Editing Print Description

Enter the editing mode by selecting Report header, Page header, Report body, etc. You will be presented with a grid showing 10 lines and 76 columns where data can be defined. This is not the limit to the block size. You may move from item to item and scroll the block right, left, down or up as needed:

Key	Movement
[->]	Moves to next item
[<-]	Moves to preceding item
[R]	Scrolls right 40 columns
[L]	Scrolls left 40 columns
[PG DN]	Scrolls block down 5 lines
[PG UP]	Scrolls block up 5 lines

The cursor is presented following the prompt:

The possible responses are found in the lower left of your screen:

```
    A = Add . . . . . . to add something to the screen
    C = Change . . . to change something already defined on the screen
    D = Delete . . . to delete something seen on the screen
    K = copy . . . . to copy an existing value seen on the screen to another location on the screen
    [ESC]=Exit . . . end the processing of this block and return to the Design Menu.
```

Enter one of these responses and the system will provide the necessary prompting to allow you to direct various data to the screen. Default values are given within the brackets. These values can be accepted by pressing [RET]. Enter a different value by over-typing the default selection and pressing [RET]. Use the [BKSPCE] key to correct entries while the cursor is still located between the brackets. Once you move on to the next prompt, you cannot move back to the previous prompt. Use the [ESC] key to cancel the operation and start again.

Adding, Changing and Copying Block Data

Information of various data types may be located anywhere within a block. Placement of data consists of choosing the desired operation: Add, Change or Copy.

Add is chosen by depressing the letter "A" (no [RET] needed) and is used to place a new item on the screen. Change is chosen by depressing the letter "C" (no [RET] needed) and is used to alter an existing screen value by changing the [default] values. These values are displayed in sequence by pressing the [RET] key. Copy is chosen by depressing the letter "K" (no [RET] needed) and is used to duplicate the existing highlighted value. Simply change the line number and/or starting character position and any other values as necessary.

Once a process has been chosen, the location within the block is required:

* Select the line number within that block where you wish the data to appear

The location is not critical. Screen data can be moved to any location that is visually acceptable. Use the grid to estimate the proper position. Refer to the Special Features part

^{*} Enter desired process:

of this section for specific instructions. If you place data on line 3 and line 5 of a block, when the block is printed, line 1 and 2 will be blank, line 3 will contain data, line 4 will be blank and line 5 will contain data.

Remember, when a block is printed, the report generator looks for the last line of the block that contains data and prints everything contained in the block from line one to that last line. Also, note that the block will print in the designated printing order--report hader, page header, body, etc.

* Select the Starting Character Position for the data

In most cases, this corresponds to the column number of your printer. If your printer prints an 80 column print line and you choose a Starting Character Position of 40, then the data will start in approximately the middle of your page. If the Starting Character Position exceeds the width of the print line defined, the data will wrap to the next line.

Data items can be overlapped to provide the suppression of trailing spaces following an item's data. For example, visualize names as separate items. The last name item must overlap the first name item (from right to left) so that the first name is printed for only the length of the data present in the first name item.

EXAMPLE: To print the first name and last name overlapped and including a "blank" as a separator:

- position First_name in column 1
- position a literal blank in column 2
- position Last name in column 3

On the screen it will look like this:

F LLLLLLLLLLLLLL

The letter "F" is the first letter of the item First_name, the blank is in position 2 and the letter "L" is the first letter of the item Last_name. As a result, rather than defining the items separately and according to their individual item lengths,

and seeing the printing of the name as,

John Jones

it would appear as,

John Jones

This technique is useful when generating a report (exporting) to an ASCII file. Not only can the trailing spaces of each item be trimmed to conserve disk space, but any delimiters required by the receiving software can be inserted and overlapped just as the literal space was used in the above example.

After deciding where the data is to be placed in the block, a choice must be made as to data type:

* Identify data type

VARIOUS DATA TYPES:

<u>L</u> = <u>Literal</u>; Literals are simply alphanumeric characters. For exmple, a heading within the Report Header may consist of a literal string of characters: CUSTOMER OPEN ORDER LISTING.

 $\underline{E} = \underline{Data \ value}$; Data values are application items that are stored in one of the applications included in the report. For example or DER. Customer is the customer's name on the order record.

If "E" is selected, you will be prompted to:

* Enter APPLICATION. Item_name -

This is followed by the name of the last application referenced during this report definition process:

* ORDER.

Type the item's name or use the "Pull Down" feature by pressing the [HLP] key. The Pull Down feature will function whenever the system prompts you for input of an item name.

The display characteristics of the type "E" data value areas follows:

- An alphanumeric item will be represented by the first letter contained in the item. This letter will completely fill the space allocated on the screen for that item.
- A numeric item will display as a string of 9's. If precision decimal positions are used, the decimal will be seen. If the money type is used, the \$ sign displays.

<u>A = Auto Increment</u>; An Auto Increment is a numeric value. It has an Initial Value and an amount to be Incremented or added on, after each use. It is most often used for page or line numbering. For example, if an auto increment cell is found in the Page Header, it will be incremented each time the Page Header block is processed. If it is found in the Report Body, it will be incremented for each record selected for processing.

 $\underline{D} = \underline{Date}$; This_data type will produce the current System Date in its defined position.

F = Formula Formulas are the results of arithmetical operations of which only the resulting value is printed. They can be expressions that are evaluated to produce a specific result or conditioned by the familiar "IF" statement so alternate output data can be generated in the same location of the block. Report Data allows formulas so data can be manipulated as records are being processed for printing, thus reducing the amount of data that must be stored in a record. Formulas are very similar to numeric expressions in the Procedural Language.

Rules of Thumb for Creating Formulas

A formula statement can be up to 110 characters in length. A formula statement may NOT end in a semicolon. You may use the assignment operator (:=) if you wish to print and/or temporarily store the result of the formula for subsequent calculations or future printing.

Formulas can be located in the same line number and character position in a block. They will be processed in the order in which they were added to the block, i.e. from the top of the block (as they were entered) from left to right and from top to bottom. This is particularly useful if you want different output to be presented in the same location based on an "IF" condition, e.g. dunning messages on invoices for 30, 60 and 90 days would be different but placed in the same relative position in the block.

The formula can be assigned a Print Attribute of '12" (hidden) to prevent the results from being seen when the block is presented.

Formula Types

There are two different types of formulas that can be used throughout Report Data: numeric formulas and text formulas.

Numeric formulas evaluate to produce a number and can contain any of the following:

- * Numeric data items; types 2, 3, 6 and 7
- * Constants; no commas or \$ signs
- * Operators; * / + -
- * Parentheses; up to 50 levels of nesting
- * Memory Variables; %0 to %29 (See Memory Variables this section)
- * Date functions that evaluate to a number (See Date Functions this section)
 * User prompts defined as (P#) numeric (See this section, Record Selection, User

* String Memory Variables defined as SMV(x, y) or SMV#(x, y) (See this section, Using the SMV)

Text formulas evaluate to produce literal strings and can contain any of the following:

* Date functions that evaluate to strings (See this section, Date Functions)

* User prompts defined as (P!) alphanumeric (See this section, Record Selection, User Prompts)

* String Memory Variables defined as SMY! (x,y) (See this section, Using the SMV)

NOTE: The user is cautioned to pay strict attention to how the various functions are combined so that numeric formulas always contain expressions that evaluate to numeric values and text formulas contain only expressions that evaluate to literal strings.

Special Formula Features

The "IF" conditional formula is of the IF THEN ELSE format. You may attach up to 255 "IF THEN ELSE" statements in the same character location. Only 110 characters are allowed, but individual formulas can be "stacked" on top of each other. The processing priority is first entered, first served.

Formulas may contain logical operator. The use of the AND, OR and NOT can be very useful within a formula. The form must be abbreviated (to conserve space) as follows:

Operator	Symbol to Use
AND OR	&
NOT	~ (tilde)

The test for NO data within an application item or the Null condition is another valuable feature. The formula format is identical to that of the Procedural Language:

* If Null(Apname.Iname) then

Blocks may be exited from anywhere within the block. This is accomplished by conditioning the Exit command:

* If (condition) then Exit

If this test is true, the block will not process further data, from the location of the Exit command to the end of the block

String Memory Variables (SMV) are usable within the Reporter. The function allows the retrieval of data FROM the SMV and the storing of formula and assignment (:=) results INTO the SMV.

In order for the Reporter to properly handle the characteristics of a given item (i.e., numeric/alphanumeric) and treat it correctly, an additional symbol is added to its form. The "#" sign indicates numeric data and the "!" point indicates alphanumeric data. If neither symbol is used, the contents referenced is assumed numeric. The formula would look something like this:

```
%5 := SMV\#(3,4) * Order.Qty
If SMV!(x,y) = 'Paid' then . . . .
If Order.Stat = 'Cancel' then SMV(12,10) := SMV(12,10) + Order. Amount
```

FORMULA %3 := Order.Qty*1.5

EXAMPLES: $(Order.Cost +100) / Cust.Num_itms$ (Order.No + %2) * (Cust.No + %1)

p! 1 <--- prints the contents of first user prompt found on the Record

Selection screen possibly the start date of the report.

If Order.Stat = 'Cancel' then 'THIS ORDER WAS CANCELED:'

... this would print in columns 1-24 and order. Can_date ... would be defined to start printing in position 26.

If Null(Order.Phone) then 'NO PHONE!'

If %A > = 30 & %A < 60 then Cntrl.Messagel Else

If %A > = 60 & %A < 90 then Cntrl.Message2 Else

If %A > = 90 & %A, 120 then Cntrl.Message3

When a formula is entered, the system checks for errors. If an error is detected, the cursor will be placed over the error and an appropriate error message will be displayed. Editing functions such as [DEL] and [INS] are active for changing or correcting formulas.

* Printer Attribute; This defines the manner in which your printer will format this particular data. Enter the corresponding printer attribute number from the selection at the bottom of the screen.

NOTE: Printer attributes 1 through 7 must be defined in INSTEAM, and your printer must support each attribute used.

Attribute numbers 8 to 11 are for Custom Print Attributes. also are also defined in INSTEAM and are concerned with special custom attributes supported by your printer.

Attribute number 12, Hidden, prohibits data visibility when the block is processed.

* Print Format; This selection pertains to the way in which items appear within the data area. Special TEAM-UP Print Formats will give reports a polished look. The formats available are as follows:

FOR NUMERIC DATA TYPES:

<u>G</u>= <u>General</u>; This format prints the data exactly as it is stored. This is the way you see the data in the Access Data section of Data Manager.

<u>comma</u>; This format prints numeric values with commas inserted. For example, a value of 123456 prints as 123,456.

\$=Money This format Places the designated money Character set by INSTEAM to the far left of the item data area and places blanks between the money character and the first whole number. For example, a value of 144.04 with an item length often is seen as: \$ 144.04.

F=Float \$; **This** format places the designated money chracter set by INSTEAM immediately preceding the first whole number and inserts the designated thousand separator. For example, a value of 1144.04 with an item length of eleven is seen as: \$1,144.04.

*=Pad \$: This format is identical to \$=Money except that the spaces between the money character and the first whole number would be filled with the asterisks. This is what is commonly known as check protection. For example, a value of 144.04 with *a* field length of nine, prints as: \$**144.04.

<u>% = Percent</u> This format multiplies the numeric item by 100 and places the percent (%) sign to the right. For example, a value of 0.05 prints as 5% and a value of 0.0006 prints as 0.06%.

FOR ALPHANUMERIC DATA TYPES:

<u>L=Left justified</u>: Left Justified is the normal default value. Data is presented exactly as the item is placed in the block.

<u>C</u> =Center justified; The data is centered in its designated area. For example, if an item has a starting character position of one, is 40 characters in length and the data stored in the item consists of 20 characters, then there would be 10 characters to the left and 10 characters to the right of the 20 characters of data when presented.

<u>R= Right justified</u>; The last character of an item's data is placed to the far right of the item's designated character position in the block.

N= Not Justified; Data may be placed randomly within the data block. The report generator will not alter the designer's placement of data.

- * Field Length; When specifying a data type of "E, F or V", the system will display the default value length of an item and prompt for a response. Press [RET] to define the entire length of an item. To change the displayed length, type a different value, then [RET].
- * Precision; For type "E and F" numeric items, an additional prompt will ask for decimal precision. Whole numbers can be reported with precision and decimal numbers can be presented without their decimal values.

Questions at Conclusion of Block

At the conclusion of data entry and after depressing the [ESC] key to exit the block definition, you are asked several questions that describe the manner in which you want the block to be processed.

* Enter printer attribute for this Block

The numbered options (from 1 to 11) associated with this step are identical to the previously discussed options for the Print Attribute of a block item. The number selected determines the code sent to your printer just before this block is to be printed. The number is canceled after the block is printed. Print attributes of data items within the block may override this attribute or work in conjunction with it, depending on which attribute you use and how your printer handles these attributes. Consult your printer manual to gain an understanding of how various attributes interact.

* Should blank data lines be printed

The key word in this prompt is data. If any block line contains only null data items, the print line will not be processed. This eliminates blank lines in the output.

EXAMPLE If you defined three lines to be printed in the block--line 1 = Name, line 2 = Address, line 3 = City--and a record is selected that has no data entered for Address, it can print in one of two ways:

Response [Y] gives: Name

City

Response [N] gives: Name

City

Your choices are:

1 = Single 2= Double 3 = Triple 4= Quadruple

The actual spacing chosen will NOT be seen on the screen while defining the block. The numbers mean that 1 times, 2 times, 3 times or 4 times the number of lines used on the screen during the design process will be used during printing.

* Enter number of blank lines to FOLLOW this block

After a block has finished printing, you may print O to 255 blank lines to provide spacing between the blocks and to add impact to each section of the report. A zero will begin the

^{*} Enter spacing for this Block

next processed block on the line immediately following the last line of print in the block now being processed. The entry of a "-" (dash) instructs the reporter not to issue a carriage return/line feed following the completion of the block. The next block will be processed to print on the same line as the end of the previous block.

ALTERNATE PROMPT. .. Summary blocks only:

* Enter number of blank lines to PRECEDE this block

As Summary blocks print at the end of breakpoints, pages, reports, etc., the spacing for these blocks precedes the block processing. When designing your reports, take into consideration that the lines of the last block processed will print; then the lines of the Summary block will print and can be preceded by blank lines if necessary.

4- Report Header

The Report Header is the first block that is printed in a report. We recommend that you define the report title line as a literal character string, although any type of data may be placed in this block. After entering the data to be processed and answering the prompts previously discussed under Questions at Conclusion of Block, you are prompted for:

* Where should the report header be printed?

Options at the bottom of the page indicate:

T= Top of every page F= First page of report only

NOTE: If option "F" is chosen, the Report Header block will be processed ONLY at the beginning of the report.

5- Page Header

The Page Header block follows the Report Header block that prints on the first page. The Page Header will be printed every time a new page is started as defined by the description of page size (see this section, Miscellaneous Parameters, Set Page/Label Size).

6- Report Body

The Report Body block prints once for each record selected for processing as defined by the report Record Selection criteria (Design Menu choice #2). If the Body block contains three lines of data with one blank line following the block (see Questions at Conclusion of Block) and only two records meet the selection criteria, then your report would look like this:

Report Header

	(Body)	XXXXXXXXXXXXXX
I		XXXXXXXXXXXXXXX
i		XXXXXXXXXXXXXX
	(Body)	xxxxxxxxxxxx
		XXXXXXXXXXXXXX
		XXXXXXXXXXXXX

After entering the data to be processed in this block and answering the prompts previously discussed under Questions at Conclusion of Block, you are prompted for:

This question allows each record processed to be printed at the top of a new page by entering 'Y', for yes, at the prompt. You may also enter a number between 1 and 9. This will cause the system to check for the required number of lines remaining on the page to group your data blocks together.

Summary Block Capabilities

Summary blocks have special capabilities not available in other blocks. They are unique in that, when an application item is defined in the block, the summary will perform the appropriate calculations based on which summary block contains the item. For example, if an item is defined in the Page Summary block, the value of the item will be considered for each record chosen for processing and the proper summary results will be presented when the Page Summary is processed. If the item is defined in the Report Summary area, then the summary results would be accumulated and presented when the Report Summary block is processed.

The results of some predefined types of calculations can be defined and performed as each record is processed. The available arithmetical computations are:

Numeric application data items can be averaged, counted or summed They can report minimum or maximum values. Count and Data functions may be performed on any type of data item.

^{*} Should this block be printed at the top of a page

NOTE: The computations are performed on the specified data item each time a record is propessd REGARDLEES OF WHETHER THE SPECIFIED ITEM IS PRINTED IN THE REPORT BODY BLOCK.

If an item is placed in the Summary block, but not in the Report Body block, the Summary block computation will contain the results of all records procesd. The number of records included in the calculation depends on which Summary block is used.

The Predefined Computations

Average; While adding or changing an item in a summary block, choose the letter A when prompted for what type of calculation. This causes the average value of the data contained in the specified application item to be printed when the summary block is processed. The Average is calculated based on each record processed. This prompt is returned if 'E' was entered at the prompt: Identify Data Type.

<u>Court:</u> While adding or changing an item in a summary block, choose the letter C when prompted for what type of calculation. This causes the Count to start at zero, increment by 1 for each occurrence of the specified application item and print the count when the summary block is processed.

<u>Summation</u>; While adding or changing an item in a summary block, choose the letter S when prompted for what type of calculation. This causes the Sum of the data contained in the specified application item to be printed when the summary block is processed. The Summation is calculated based on each record processed.

Minimum; While adding or changing an item in a summary block, choose the letter M when prompted for what type of calculation. This causes the smallest value of the data found in the specified application item to be printed when the summary block is processed. The Minimum is calculated based on each record processed.

<u>Maximum</u>; While adding or changing an item in a summary block, choose the letter X when prompted for what type of calculation. This causes the largest value of the data found in the specified application item to be printed when the summary block is processed. The Maximum is calculated based on each record processed.

<u>Data</u>; While adding or changing an item in a summary block, choose the letter D when prompted for what type of calculation. This causes the value of the data contained in the specified application item to be printed when the summary block is processed AND IS THE VALUE OF THAT ITEM FROM THE LAST RECORD PROCESSED.

NOTE: If Sub Report Summaries are involved, the D=Data type summary item is the data from the record processed prior to the breakpoint occurring (see later discussion on SUB REPORT DESCRIPTION, Sub report summary).

7- Page Summary

The Page Summary block, if defined, is the last block to be printed on each page. If the block contains two lines, then the last two lines printed on each page would be those defined here. Use the page summary to include page numbers utilizing the auto increment data type. You may also position page totals into pre-defined areas of a pre-printed form such as an invoice. All totals, averages, etc., are calculated on a page-by-page basis. However, any type of data may be placed in the block.

Remember that TEAM-UP keeps track of the number of lines printed and knows when to stop to allow sufficient space at the bottom of the report to process the Page Summary.

8- Report Summary

The Report Summary is the last block processed for a report. It functions very much like the Page Summary block except that all totals, averages, etc., reflect every record processed during the entire report. If a Page Summary is defined, the Report Summary will be printed on the following page.

Sub Report Description

This part of TEAM-UP's Report Data Operations gives the user sophisticated reporting capabilities by allowing the report to be broken down into sub-parts that match the report order (Design menu selection #l). These sub-reports are controlled by naming the corresponding application item used in Report Order under the corresponding Sub report Breakpoint (Design menu selection #9). For each defined Sub report Breakpoint, you may have a corresponding Sub report Header and a Sub report Summary. You can use the Header, the Summary or both.

9- Sub Report Breakpoint

Subdivisions of a report are defined through sub report breakpoints. The function of adding, changing and deleting breakpoints is essentially the same process as Report Order. To Add or Change sub report breakpoints, name the item by typing it or pulling from the help list. Tell TEAM-UP how many characters of the item are required to detect a "break" or change in the item's value. To Delete a breakpoint item indicate its number from 1 to 9. In most cases, the selections in Report Order and Sub report Breakpoint are exactly the same, as it is customary to break reports into parts (or sub+totals) in the same order in which they are sorted. After establishing the Sub report Breakpoints, you will be able to design a Sub report Header and a Sub report Summary for each breakpoint defined.

10- Sub Report Header

Before you enter the Sub report Header block, you are presented with a screen that displays the breakpoints that were defined in the Sub report Breakpoint selection #9. You may have a Sub report Header for each of these breakpoints; however, you need not have any at all.

To choose a header's breakpoint, type the appropriate number of that item and press [RET]. The block grid, which is identical to all previously discussed blocks, shows the possible row and column positions for data as well as the Add, Change, Delete and Copy options. The header block prints each time the defined Sub report Breakpoint changes. After entering the pertinent data and answering the prompts previously discussed under Questions at Conclusion of Block, you are prompted for

* Should this block be printed at the top of a page

This question allows the Sub report Header block to be printed at the top of a new page EACH TIME THE DESIGNATED BREAKPOINT ITEM DATA CHANGES. You may also enter a number between 1 and 9. This will cause the system to check the remaining printable lines on the page and group the data blocks accordingly.

11- Sub Report Summary

From the screen displaying the defined breakpoints (Design menu #9), choose the breakpoint to which this summary belongs. This block prints each time the breakpoint item data changes. Any type of data can be placed in this block. As this is a Summary block, data values can be averaged, summed, counted, etc. After entering the pertinent data and answering the prompts previously discussed under Questions at Conclusion of Block, you are prompted for;

* Should this summary be printed at the bottom of the page

Answering YES to this question will place this block's information at the bottom of the printed page, emulating the page summary function. Whenever this summary is printed, a page summary will not be printed on that page. This allows the printing of two different page summaries, depending on the placement of the report.

EXAMPLE: Application = SALES

Report Order = Region_number

Sub report Breakpoint = Region_number

Data = Region_name; CHICAGO & NEW YORK

The following takes place:

- * The Sub report Header prints when the first record containing CHICAGO is encountered.
- * Then, a Report Body block prints for each record where CHICAGO is the region.
- * when the first record containing NEW YORK is encountered, the Sub report Summary defined for Region_number (if there is one) will process. Upon its completion the Sub report Header for Region_number will print containing the data from the NEW YORK record which caused the "break" to occur in the breakpoint item.. .Region_number.

* Then, a Report Body block prints for each record where NEW YORK is the region.

* Etc.

Miscellaneous

This section contains a number of important Report Data capabilities of a general nature.

12- Change Report Name

Any report name may be changed by using the Change report name Design menu selection. Report names are limited to 16 characters in length (including blanks). Choose this selection and enter the new name at the prompt. Press the [ESC] key to abort your choice.

13- Change Report Description

The description of a report may be changed through this Design menu selection. Report descriptions consist of any ASCII character that can be typed and limited to 110 characters in length. Enter your new description at the prompt or press [ESC] to abort this menu choice.

14- Update Printed Record

This feature of the reporter allows application data items to be updated after a record has been processed during report generation.

The item to be updated may be in the main application OR IN A RELATED APPLICATION. The item may be updated with:

Applications may be updated as the records are being reported. An example is updating an order application to prevent duplicated processing after an invoice has been printed. Up to nine (9) data items can be updated each time a record is processed. Updating can be controlled through formulas, if used.

NOTE: KEY ITEMS CANNOT BE NAMED AS AN ITEM TO UPDATE!

(A)dding, (C)hanging and (D)eleting is performed in an identical manner throughout the Report Data module. Press [ESC] to exit process.

15- Miscellaneous Parameters

This menu selection allows you to set special parameters for a report. These parameters include:

* security

- * Overall page and label size definitions
- * special pre-defined generation parameters
- * report generated processing prompts for the operator

1- Set Security

Each application created by TEAM-UP has security levels (0-9) for limiting the various functions performed against the application. Printing is an application function that can be limited based on the operator's security level. However, a user's security level must be equal to or greater than the application's Print security in order for the operator to print the report, either from the Access Data screen or the Reporter.

The Reporter can enforce security on a report in two different ways. The reporter can: (1) veriy a number between O and 9 when prompted for Security level required to change this report and (2) verify a number between O and 9 when prompted for Security level required to generate this report. The change security level also applies to the right to delete a report.

A user's security level must frost be equal to or greater than the application's functional PRINT security level to list the application's reports, AND second, be equal to or greater than the Report's Change or Generate security levels to operate within the Report Data module on the named application's reports. It is possible for two users to have access to an application's reports. However, based on their security levels, one user could be limited on which reports he could execute or change.

2- Set Page/Label Size

You may use Report Data to generate mailing Labels or regular printed reports. Your response to the prompt:

* Will this report be generating labels

will determine whether you are queried for label or page parameters.

Page Parameters

* Enter MAXIMUM # of lines that will fit on a page. . . [66]

The default is 66 lines; however, you can enter any number from 1 to 255. Adjust this number to fit any form you may be using.

* Enter the desired number of lines to print per page . [60]

This number should always be less than or equal to the maximum # of lines per page above. The default is 60 lines. The difference between the maximum number of lines per page and this parameter will be divided in half to provide automatic top and bottom page margins. Adjust this number to your needs.

* Maximum line length of your printer [80]

This number should be less than or equal to your printer setup. When this length is reached, any characters remaining to be printed on the line are wrapped to the next line. The internal auto wrap feature forces a right margin when printing long text.

NOTE: IF THE NEXT PROMPT FOR THE NUMBER OF CHARCTERS IN THE LEFT MARGIN IS TO CONTAIN ANYTHING OTHER THAN A ZERO, THAT VALUE NEEDS TO BE ADDED TO THIS MAXIMUM LINE LENGTH TO PREVENT WORD WRAP.

* Enter the number of characters in the left margin . . [0]

The default setting is zero and causes the data to be printed exactly as placed in the blocks. Using a number greater than zero forces a left margin, offsetting the data in the blocks from left to right by that amount. Also, by using a number such as 10 and setting your printer maximum line length for 10 to 15 characters narrower than your paper, you can print data with right and left margins.

* Use Form feeds or Spacing to find top of form (F/S) .[S]

The default for this prompt is "S" for Spacing, which counts the number of lines processed per page and issues the appropriate number of lines to reach the top of the next page. IT IS RECOMMENDED THAT YOU USE THE DEFAULT UNLESS block printer attributes that cause various blocks to print in different numbers of lines per inch are being used. If the Form feed option is used, you will need to do a bit of experimenting. This option is provided for those with special printing requirements.

* Pause on page break (for single sheet report) [N]

The default for this prompt is "N" for No. This means that continuous forms are being used. Change this value to "Y" for individual form feed.

* Should form feed be sent at end of print. [Y]

The default for this prompt is "Y" for Yes and assumes continuous forms are being used and the paper advance is appropriate.

NOTE: The printing of labels usually does not require a form feed upon completion.

Label Parameters

When you respond with Y to the prompt:

* Will this report be generating labels

you are asked for a different set of parameters than when choosing N.

This option can be used to generate mailing labels. Multiple labels are permitted provided the characters-per-line limit of 255 is not exceeded. If the data on a line exceeds the length of the label, then the data is truncated. THE INTERNAL AUTO WRAP FEATURE IS NOT INVOKED.

Report Body blocks are generally used to produce labels. However, there are special provisions that allow combining Page reporting and Labels into one report.

* How many labels across each page [1]

This can be any number, but remember the 255 character limit mentioned above.

* How many lines from top of one label to top of next . [10]

This can be any number. If using continuous form, use a printer ruler to determine the correct number.

* How many characters wide is each label. [40]

This is the number of characters from the starting position of the first label to the starting position of the next label. Again, use your printer ruler to help determine the number of characters.

For example, if you have two labels as shown below:

x Y

The number of characters starting at the X in the first label up to, but not including, the Y in the second label is used to determine the character width for each label.

* Which line of the label should text be started on . . [1]

This option eliminates the need for the Body block to be designed (or aligned) line by line relative to the position each printed label line. If the label size being used allows ten printed lines and only six lines are necessary, do not begin line definition on line 3 to center the label. Define all six lines and use this parameter to start printing on line 3--leaving lines 1 & 2 and 9 & 10 blank.

* Should blank lines in text to be printed [N]

The default is N for No. Using the default gives a neat, professional look to labels. It eliminates the printing of any lines which contain "blank" data and pulls up any following lines.

* Do you want to print on only part of the page [N]

The default is N for No and should be used if all the report does is print labels. If Y is chosen, the reporter visualizes the report as having Headers and/or Summaries as well as Labels-or data printed in the form of labels. The following description illustrates this choice:

- 1- The Sub report Breakpoint item is the Order_number.
- 2- The top part of the invoice is defined in the Sub report Breakpoint Header and will print at the top of new page when a new order number is read.

This would include sold_to and ship_to name & address, dates, customer_number order_number, invoice_number, what was ordered and the amounts with totals.

3- After the Sub report Breakpoint Header prints, the Body block would be processed.

Since our report is defined as generating labels, then the Body block is treated as labels.

4- Each record printed in the Body block is from another application that contains a single record for each serialized TEAM-UP system that is to be shipped with the order.

Each serial number shipped will print on the lower half of the invoice from left to right, top to bottom. Thus, allowing more items to print than if they were simply listed in a column.

* Should form feed be sent at end of print. [Y]

The default for this prompt is "Y" for Yes and assumes that a printer form advance is appropriate when the job is complete.

3- Set Generate Parameters

Defining report generation parameters from this selection allows an operator to bypass the generation prompts. Any or all of these parameters may be assigned an execution default value; i.e. a value that is preset during report design so prompting during report generation is not needed. When the default for a prompt is not changed and remains a dash [-], it causes that prompt to be displayed when the report is generated and will require a response from the operator.

During the design process, the prompts are as follows:

* Enter the drive for temporary sort files, if needed . [-]

Reports requiring a sort utilize a number of temporary files that are associated with the sort. By placing a drive designator in response to this prompt, you are assured that these files will be placed on a drive with sufficient space.

* Enter the destination of this Report (-, S, P,F). . . .[-]

The responses are: S = Screen P = Printer F = File

Selecting S or P will not require prompts other than those explained below. If the report is to be sent to a file, additional prompts will be presented:

* Enter the filename this report should be placed in. . []

The form used to type the filename should include the TEAM-UP drive letter if the desired drive is not the default drive. (EXAMPLE: A: Test.exp; an ASCII file named Test.exp will be exported from the TEAM-UP reporter to the A drive.)

NOTE: Data is NOT APPENDED to an existing file. lhe file is actually re-created and rewritten each time.

HOWEVER, THIS IS ONLY TRUE WHEN THE FILENAME IS DESIGNATED DURING THIS DEFINE PROCESS. IF THE [] (NO FILE NAME GIVEN) REMAINS AS THE FILENAME, THE OPERATOR HAS THE DUTY TO NAME THE EXPORTED FILE WHICH CANNOT BEAN EXISTING FILE AND, THEREFORE, WILL PROTECT FILES FROM BEING DESTROYED.

SPECLAL NOTE: If a file name is given at this prompt, the only valid way to remove any future reference to the file is to respond with a dash (-) when asked for the file name. This will return the default value to the appropriate []. A SPACE CANNOT BE USED!

* Enclose non-numeric fields in quotes and insert a comma after all but the last field of a line (n/y).[Y]

This is equivalent to delimiting data. TEAM-UP provides an automatic division between data items as they are selectively reported.

EXAMPLE To export customer data from the CUSTOMER application, the items are defined as follows:

Define in Item Name	e Lgtn
Col 1 = Customer_numb Col 2 = Customer_name	
Col 3 = Customer addresses	
Col 4 = Customer_balar	ice -> 7

The first and subsequent data records are written to the exported ASCII file (delimited or "Y") as follows:

```
1001,"John Jones","123 Main St",350.00, etc.
```

However, if the data needs to be delimited by a different method, then the report creator has to insert the needed "delimiters" during the definition of the appropriate block. Using the same application, let's see how this works:

```
Col 1 = Customer_number

Col 2 = ':' ...a literal colon to separate data items

Col 3 = Customer_name

Col 4 = ':'

Col 5 = Customer_address

Col 6 = ':'

Col 7 = Customer_balance

Col 8 = '*' ...an asterisk to mark the end of a record
```

The data records are written to the exported ASCII file as follows:

```
1001:John Jones: 123 Main St: 350.00*
```

Finally, if delimiting is not requested OR designed, the exported record will look like this:

1001John Jones123 Main St350.00

To keep trailing blanks from being trimmed, DO NOT OVERLAP THEM! Like this:

Define in	Item Name	Lgth.
Col 1 = C	ustomer_number ->	4
Col 5 = C	ustomer_name ->	12
Col 17 = C	Customer_address ->	15
Col 32 = C	Customer_balance ->	7

Then the data records are written to the exported ASCII file as follows:

General Note

THE PROCESS OF WRITING A DOS FILE FROM THE REPORTER WILL TAKE ON THE FOLLOWING CHARACTERISTICS:

1. Each record written will end with a carriage return/line feed character.

- 2. The DOS end-of-file marker, "Z, will represent.
- * Should the generation of this report be abortable . . [Y]

If you choose Y (Yes), the operator can abort the report generation process by pressing the [ESC] key. If you choose N (No), the operator will NOT be able to abort the report generation process by pressing the [ESC] key.

NOTE: When using Update Printed Record (see this section, Design Menu option 14-Update Printed Record), your report should probably not be aborted.

O=None	1 =Underline	2=Italics	3 = Sub
4= Super script	5 =Expanded	6= Compressed	7=Bold
8-11 =Custom	12=Hidden		

^{*} Enter the printer setup sequence for this report. . . [0]

This is a sequence sent to the printer before report generation begins. It will remove the necessity to define the printer setup sequence for each individual item or an entire block. If the report needs to be totally compressed, indicate here and the entire report will be printed in compressed mode.

Enter the number comesponding to the desired attribute as defined in INSTEAM.

* Negative number display: 0 = -NN, 1 = NN, 2 = (NN)

The default print format for negative numbers is: -123.45. If, however, there is a need to print such numbers in the standard accounting form, then the answer [2] would allow the following print format: (123.45).

HINT: When defining the allocated block space (FIELD LENGth~) for negative items, provide one additional space to accommodate the minus sign and two additional spaces to accommodate the pareruhesis.

4- Set Start/Stop Key Prompts

* Utilize start and stop keys, if possible [Y]

The response to this prompt is Y or N. It is directly related to the Design Menu choice #1 - Report Order. When the first sort item under Report Order is a key, using the start and stop keys hastens the generation process. The range of records which will be processed based on the Record Selection Criteria will be narrowed.

EXAMPLE: The generation of a report from the application STATES has State as the first sort item. Using Florida as the start value and New York as the stop value causes all the records prior to Florida and after New York to be skipped. This means

that only the records from Florida up to and including New York have the selection criteria applied to them.

If possible, respond with Y (Yes) to speed up the generation process as described above. A response of N causes the selection criteria to be applied to each record in the application and no further questions will be presented for response at this prompt. If the decision is made to utilize Start and Stop key values, you will be requested to respond to the following:

* Prompt for start key [Y]

If the answer is Yes, the operator will be requested to respond to a prompted message before report generation begins. The response can be any value typed or an SMV location.

* Message for the start key []

If no message is typed, then the system will provide its own message to the operator. However, if a special message is desired, type the request in your own words. If the answer is No:

* Default value for start key []

This value will appear as if a message was presented. It can be any value typed or an SMV location.

THE VALUE WILL ALREADY BE SET WITHIN THE REPORT DESIGN AND THE OPERATOR NEED NOT RESPOND TO ANY REQUEST.

* Prompt for stop key [Y]

If the answer is Yes, the operator, before report generation begins, will be requested to respond to a prompted message. The response can be any value typed, the word START to use the start key value or an SMV location:

* Message for the stop key []

If no message is typed, the system will provide its own message to the operator. However, if a special message is desired, type the request in your own words. If the answer is No:

* Default value for stop key []

This value will appear as if a message was presented. It can be any value typed, the word START to use the start key value or an SMV location.

THE VALUE WILL ALREADY BE SET WITHIN THE REPORT DESIGN AND THE OPERATOR NEED NOT RESPOND TO ANY REQUEST.

The Exit selection will allow you to return to the Design Menu.

Special Features

This section contains some of the Special Features mentioned in other areas of Report Data documentation.

Pull Down Items

There is NO need to memorize application item names when working in Report Generator. Whenever you need to enter an item name a "pull down" list of all the items in the main or related application is available.

To use the "pull down" list, position the cursor after the period following the application name and press the [HLP] key. When the items are displayed, pressing the [ARROW] or [TAB] keys moves the highlight from one item to another. Move the highlight over the desired item and press [RET] to select that item. To confirm your selection press [RET] again. Use the [ESC] key to cancel your selection.

User Prompts/Runtime Variables

In the Record Selection option of the Design Menu, you may enter messages that prompt the operator for a reply rather than entering a specific constant value for a test condition. The user's response to this message is taken as the operand to use in performing the Record Selection, providing for variable input as opposed to built-in, fixed values. For more details, see Record Selection under the Design Menu.

Date Formulas & Functions

Dates are defined within TEAM-UP's INSTEAM program. They can be either: mm/dd/yy or dd/mm/yy. The date references on the following pages indicate one of the forms specified above. What form you choose will not influence how you use the Date functions; TEAM-UP handles that internally.

A Formula is an expression that can be evaluated to achieve a specific result. Report Data allows formulas so your data can be manipulated as the data is being processed for printing. Text formulas evaluate to produce literal strings and can contain special date functions to produce specially formatted reports. Date functions are used for conversions of dates between their numeric form and their literal form. Their numeric value can be in either an application item or the system date (SDATE).

Special Date functions that return numeric values are:

DAYS(date) DAYS('01/31/85') ---- >2588

DATE(numeric expression) DATE('2588') \longrightarrow 01/31/85

DATE(DAYS(SDATE) + 10) ---> SDATE = 01/31/85 then DATE would

equate to 02/10/85

DOW(date) DOW('01/31/85') ----> Thursday

MONTH(date) MONTH('01/31/85') ---> January

DAY(date) DAY('01/31/85') ----> 31

YEAR(date) YEAR('01/31/85') ----> 1985

RULE: If year > = 78, returns 19xx if year < 78, returns 20xx.

MONTHN(date) MONTHN('01/31/85') ----> 1

SYEAR(date) SYEAR('01/31/85') ----> 85

Memory Vatibles

There are 30 numeric memory variables that may be used for each report. A memory variable is like a scratch pad used to store intermediate calculations during the running of a report. These variables are manipulated through the use of formulas and are identified by a % (percent) sign followed by a number from O to 29. Thus, the variables are %0, %1, . . . %29. These variables are available for use in any of the blocks, but are NOT STORED FROM ONE REPORT GENERATION PROCESS TO THE NEXT.

All Memory variables are initialized to zero at the start of the report generation process. You can manipulate these variables in a number of ways as your report processes. Use of a hidden print attribute will enable the formula and its results to be invisible. To print the contents of a variable, it must be defined in a formula and NOT hidden.

Establishing Relationships Between Applications

TEAM-UP's Report Data manager allows you to merge or join, data from up to 10 applications--the main application and nine related applications. Each report associated with an application can contain data from 10 different applications. The main application is the one under which you find the report listed.

Related applications are those that are brought into the report by establishing a "link" (common data item such as customer number, invoice number, etc.) from one application to a key item in another. During the report definition process, you will be prompted for an item name:

^{*} Enter APPLICATION. Item name - ORDER,

If the application name displayed is accurate, the item name can be typed or pulled down. However, if the data required is to come from some other application or from a different record in the same application, you may use the [BKSPCE] key to erase the displayed application name. Type the appropriate application name followed by a dot (period) and the item name

* Enter APPLICATION.Item name - CUSTOMER. ADDRESS

If data from a different record within the same application is needed, you can create another link to the main application, thus treating it as though it were a related application. Append an @ sign to the end of the application name to distinguish between different links (e.g. apname@, apname@l). This procedure can be used to create multiple links to any application accessed by the report. If the relationship between the two applications has NOT been established, you will be prompted for the relationship:

* Define Application Relations

Assume NO relationship has yet been established and that our applications are as follows. The ORDER application does not contain the customers address as stored data. It must *retrieve the* address data from the CUSTOMER application when printing invoices. The common "link" is the customer number. For this example, the screen display prompts are in small print and the responses are in BOLD print and underlined.

The prompts and responses are:

* Enter the application that CUSTOMER links to: ORDER

This is similar to the Access command within the Procedural Language.

* Enter item name from ORDER. Cust#

This is equivalent to the Keydata command within the Procedural Language. It is looking for the data from the main application that will be used to retrieve (link to) the CUSTOMER application.

Literals or SMV locations can be used as the KEYDATA. To specify a literal, enter it enclosed in single quotes where you would normally enter an item name. To specify an SMV location, enter SMV(N,N) at the prompt, where N is a number stating the offset or length. Although these data types do not come from an application, you must still specify a source application at the above prompt. Use the main application as the source.

The SMV() form of KEYDATA allows the user to do dynamic joins as the report is generated. Formulas elsewhere in the report can be setup to assign the needed data to the SMV location. Since Record Selection is the only report function performed before the link or join is done, this is the appropriate place for this action to occur. Add the formula as though it were selection criteria and remove its reference from the logic line.

* Enter KEY item name from CUSTOMER.Cust#

This is equivalent to the Key command within the Procedural Language. It is looking for the KEY Item in the CUSTOMER application that the Keydata is to match.

* Enter the type of relationship [0]

0 = 1 or more 1 = 0 or more 2 = only 13 = 0 or more w/null (Add 4 for partial)

There are actually 8 different choices which can be made; O -3 and 4-7.

When processing related applications it is necessary to know under what conditions the related records will or will not be found. The response to this prompt will be

O - if at least one or more related records will be found for each processed main application record.

If no record is found, the record from the source application will be included in the report.

1 -if none, one or more than one related record will be found for each processed main application record (also see #3 below).

If no record is found, a null record is supplied by the reporter.

2- if there will be only one related record found for each processed main application record.

If no record is found, a null record is supplied by the reporter.

3 -if none, one or more than one related record will be found for each processed main application record.

If no record is found, a null record is supplied by the reporter. If a record is found, all duplicates are read and included in the report. Once they are all located, one more null record is supplied by the reporter.

This type of relationship is helpful when Record Selection is being utilized to exclude certain records in the related application. If all related records are excluded, this also excludes the main record. If this is not desirable, you can use this relationship type to add a null record to the found records and then add selection criteria to insure that the null record is included in the report, thus ensuring that the main record will also be included.

EXAMPLE: Logic 1 ! 2 1 INVOICE.Printed NE Y 2 INVOICE.Inv# EQ - Condition 1 excludes all printed invoices. Condition 2 includes invoices where the invoice number is null. The logic line (1 ! 2) provides for the inclusion of the recorded set if the invoice has not been printed or the invoice number is null.

Choices 4, 5, 6, & 7 indicate that the entire key item data may not match and that a partial key match is sufficient for record selection. This is what is meant by Add 4 for partial. It is the same as 0 -3, only the number four is added to 0, to 1, to 2 and to 3 for the partial key value to be acceptable.

Now the relationship between ORDER and CUSTOMER is fully established. Any future reference to the CUSTOMER application will NOT produce any additional prompts. Once the relationship has been set, enter the application name and item name at the required position.

To change established relationships, see the Design Menu choice #3, Edit Relationships.

Creating Reports for Applications in Use

Reports for inaccessible applications can be developed by following the instructions listed below:

- 1. Copy the application's . TPR file to a temporary application name using the COPY function. Throughout this procedure, the original application will be referred to as AP. 1 and the temporary application will be referred to as AP.2.
- 2. Design the new report in AP.2 using the instructions given in this reference section. Test the report's integrity by enlarging the application, adding data and running the report. The report is now ready when AP. 1 is available.
- 3. Use the COPY function to copy only the report.
- 4. Use the DOS COPY command to copy the new report into M. 1's report directory.
- 5. After copying the report back to AP. 1, use TEAMUP's RENAME function to rename AP. 1 to a temporary application name. The message 'WILL DELETE .TXR AND .TB0' will be displayed. Don't worry, these files will be regenerated when you evaluate later in this procedure.
- 6. Now that you have renamed the application, rename it back to the "original" AP. 1 application name. This will take care of the application names inside the new report.
- 7. Evaluate the new report and any batch and transaction PL's if they exist.
- 8. Use TEAM-UP's DELETE function to delete the AP.2 application.

New reports can be created for an application (apl) from an existing report from another application (ap2) by performing step 3 through 7 above.

Miscellneous

Here are a few additional miscellaneous facts that can be helpful in Report Data

- * Consideration of the Start and Stop values of key items takes place before Record Selection.
- * Record selection process occurs before Sorting.
- * Making a change to an application in the Create/Change or Define portion of Data Manager necessitates an evaluation of all reports that access that application.
- * The maximum number of defined auto increment cells is 40 per report.
- * The maximum number of pre-set computations for all Summary blocks is 40 per report. For example, 2 in Breakpoint Summary, 5 computations in Page Summary and 1 in Report Summary, equals a total of 8 computations used. These computations consist of either a SUM, an AVERAGE, a MINIMUM or a MAXIMUM.

Glossary

APPLICATION A collection of work processes and data that combine to accomplish a specific group of tasks such as payroll or inventory control.

ASCENDING ORDER: Ordered from lowest to highest value. Numeric 0 to 9, and alphabetic A to Z.

ACCESS: The operation of seeking, reading and writing data from the disk.

ALPHA ITEM: A data item that may only contain characters A through Z.

ALPHANUMERIC ITEM: A data item that may contain any printable character.

ASCII: An acronym for American Standard Code for Information Interchange. This is the code used on all microcomputers.

ATTIRIBUTE A descriptive characteristic assigned to **a** particular item. This characteristic controls how the item is displayed on the video monitor. Attributes can be reverse video underline, color, **etc.**

AUTOLOAD: The process of automatically placing the user in ${\bf a}$ preselected place within the TEAM-UP system at sign-on time.

BACKUP: The process of copying an application's files, etc., to another disk as insurance against possible failure or loss of the original.

BATCH PROCESSING: A technique by which large amounts of data can be processed. Usually used when ${\bf a}$ similar change must be made to many records, such as adding 10% to the retain value of inventory items.

BLOCK: A portion of a report.

BREAKPOINT: The point at which the sub-report data value changes. A breakpoint is said to have occurred when the contents of the breakpoint data item changes from one record to the next.

CALCULATE To perform a predefined arithmetic computation.

CHARACTER: A symbol that can be input horn the keyboard. A character can be **a** letter, number, special symbol or blank space.

COLUMN: A number that indicates the starting horizontal position on either the video monitor or the printer. Columns increase from left to right, with one character occupying each column position.

COMMAND: An instruction given to the computer to carry out a specific function such as ^E to Enter a record.

COMMAND LANGUAGE: Same as Procedural Language. See PROCEDURAL LANGUAGE.

COMMAND LINE The first ten positions in the upper left hand comer of the Access Data screen.

COMMENT ITEM: Strings that are displayed on the screen only for the purpose of information. No data is stored in this type of item.

CONDITION A restriction or limitation that is applied to an operation such as selection of records.

CONSTANT: A value that does not change during an operation. Constants can be literal strings or numeric values.

CONTROL KEY: A key that when depressed in conjunction with another key that assigns a different function to the second key. The Control key is designated by ^. Access Data interprets ^E to mean Enter a record.

CTRL: Reference to the Control Key. See CONTROL KEY.

CURSOR: The visible marker on the video monitor that indicates the current position.

CURSOR ADDRESSING: A technique of moving the cursor to a specific point on the screen. There are two types of cursor addressing--direct and relative. Only terminals that use direct cursor addressing can run TEAM-UP.

CURSOR DRIVEN: The cursor controls the next place on the screen where the user can enter data.

COPY: To make an exact duplication of a file or application on a different disk drive.

DATA CASE Data can be written in capital letters or lowercase letters.

DATA FIELD: A grouping of related characters such as Name, Address, etc.

DATA FILE The file holds all the data entered for a given application. This file has the name of the application and the extension .TDR. Free record space in this file is kept track of and reused by TEAM-UP.

DATA ITEM: Has a name and data associated with its data field which is stored in a record of the data file.

DATA REDUNDANCY: A problem when for operational reasons, or to overcome DBMS deficiencies, data must be duplicated in two or more applications. TEAM-UP has the ability to selectively eliminate Data Redundancy. See NON-STORED DATA ITEM.

DBMS: The acronym for a Database Management System.

DECIMAL PLACE: The number of digits to the right of the decimal point. TEAM-UP allows a maximum of four decimal places.

DEFAULT: An option that was automatically assigned by TEAM-UP or previously assigned by an operator. This value can be left as is or changed.

DEFAULT DRIVE: The drive from which you executed the present program.

DELETE To remove a record that is stored in an application.

DELIMITER: A character used to set off or identify to the computer a specific value. Usually used to separate data fields in a report sent to a file which will be read by another program.

DESCENDING ORDER: Items ordered from highest to lowest value. Alphabetic items from Z to A. numeric items from 9 to 0.

DESIGN To lay out the format of an application in Create/Change.

DIF FILES: Data Interchange Format files; a standard file format which can be read and written by most spreadsheet programs. This format can also be read by the optional Import Data program.

DIRECTORY: The catalog of files kept by the operating system on the disk.

DISK BALANCING: Maintaining your disk in such a way that there is room to extend applications and have space for temporary files. It can also refer to moving files which have a high activity rate to different disks to improve performance.

DOS: An acronym for a Disk Operating System.

DRIVE: An indicator that tells the location of a particular file. The operating system drive tells the physical location of the drive to the computer. The drive indicator used in the TEAM-UP Path file is a logical indicator. The TEAM-UP Path file connects that drive indicator with a particular network server, disk drive and directory.

DYNAMIC: Subject to change at any time.

END OF FILE: EOF, a specific character that is written as the last character in a file to signify the end of data.

ENCRYPTION Changing the data in a file in such a way that it is no longer meaningful without reversing the process. This protects the data from being read at the operating system level.

ENTER: A function that takes the data written to the screen by the operator in Access Data and makes that data part of an application data file.

ESC: Symbol for the escape key.

ESCAPE KEY: The key TEAM-UP interprets as a "stop whatever is in progress" request.

EXPRESSION: Any valid combination of data items and/or constants to form a result.

EXTENSION: Refers to the three characters that follow the period in a file name. The extension, by convention, is used to signify the type of file.

EXTRACTED DATA: Data that is pulled from a related application.

FIELD: A subdivision of a record. The data associated with an item name. A stored or non-stored data item that can contain data values.

FIELD NAME: Same as item name.

FIELD TYPE: Same as item type.

FILE A collection of related data records stored together on the disk.

FILE MAINTENANCE: Work done on a file to keep it in usable condition. Maintenance can be enlarging a file, making backup copies, etc.

FILE NAME: The name assigned to a collection of related records. The file name has two parts. In TEAM-UP the first part is the application name with which the file is associated and the second part, the extension, signifies the type of file.

FIND: To locate a record/cords in an application that meet the stated conditions.

FORM FEED: A printer command that causes the printer to advance to the top of the next page.

FUNCTION: A particular process to be completed by the computer. Functions are automatically invoked in TEAM-UP.

FUNCTION LINE: See COMMAND LINE.

FULL ALPHA: Data item field must be completely full with only the characters A to Z.

FULL NUMERIC: Data item field must be completely fill with only numeric data.

FULL MONEY: Data item field must be completely full with only numeric characters and a \$ sign.

HOME POSITION: Upper left comer of the screen.

IMPORT: To move data into a TEAM-UP application from a foreign source file such as DIF files and ASCII files.

INDEX FILE TEAM-UP uses the Index file to rapidly find information in sorted order. This file is maintained automatically and dynamically with every change made in the data file.

The elements that make up an application record. An Item has a name with which it is to be referred. It may or may not be associated with a data field. There are three types of items: comment items, stored data items and non-stored data items.

ITEM DATA: Same as field.

ITEM LENGTH: The maximum number of characters that the item field can hold. Item length is the number of underscores assigned in Create/Change.

ITEM NAME: The name associated with a particular item by which you identify that item in TEAM-UP.

ITEM TYPE: A characteristic that controls the kind of characters that can be placed in a field. There are seven different types of items in TEAM-UP.

INTERFACE The interaction between the user and the computer or between two computer programs.

KEY: Same as key item.

KEY ITEM: An application's Key Items are represented in the Index File, and thus a specific record can be found rapidly by the data contained within this item.

KEYSTROKE: Depressing a key on the keyboard; this initiates sending a unique code to the computer.

LITERAL: An expression that is to be taken at face value. A literal can be any sequence of alphanumeric characters contained within single quote (') marks.

LOGON To sign-on and gain access to TEAM-UP as a valid user.

LOGICAL RECORD: The occurrence in the data file that represents one specific representation of the data stored there.

MAINTAIN: See FILE MAINTENANCE.

MAINTENANCE FLAG: A flag set by TEAM-UP to ensure that certain operations are be performed on an application before it is accessed.

MEMORY VARIABLE: A numeric variable to which any value can be assigned.

MENU: A list of options.

MENU-DRIVEN: A system whereby the user selects the process to be carried out by means of options.

MENU PATH: A TEAM-UP capability which allows experienced users to bypass the menus and go directly to the process they wish to perform.

MESSAGE LINE: The last line on the Access Data screen where messages are written.

MILITARY DATE: A date in the form: 11-NOV-95.

MONITOR: The video display. Also known as CRT.

MULTI-USER ENVIRONMENT: A system such as a Local Area Network in which more than one user can simultaneously access and change information in the same application. Special versions of TEAM-UP are available which operate in this environment and maintain data integrity at all times. Even though many users can be looking at the same record, no user will ever be able to change a record if it does NOT exist on the file exactly as it existed when it was originally displayed.

NON-STORED DATA ITEM: The data assigned by a Procedural Language program to a non-stored data item is displayed on the screen by Access Data, but it takes no space in the application data file. This concept allows applications to be created which limit data redundancy.

NULL: Empty. A data item that contains no data.

NUMERIC ITEM: An data item that can only contain numbers. Only numeric items can be used in computations.

ONELINER: Preselected data items that are written to the screen, one record per line, whenever an Access Data Find operation selected more than one record.

ON-LINE A transaction that is carried out in real-time by direct access to the data storage device. All entries to a file take place immediately. TEAM-UP is always on-line.

ONELINER TOTALS: The ability to sum numeric fields during a Find operation and display the total in Access Data. The operator dynamically specifies which fields on which to sum.

OPERAND: The data element in a statement.

OPERATOR: A symbol that expresses the relationship between two items. Operators are used in comparisons (e.g. c, >, =) and arithmetic computations.

OPERATING SYSTEM: The program that controls the hardware. TEAM-UP is a well behaved program that runs under the operating system.

OUTPUT: The moving of data from the computer to the screen or printer.

PARAMETER: A specific value that is assigned to a variable to allow an operator to direct the outcome of a predefined process.

PASSWORD: A specific sequence of eight or less characters that verifies the identity of a user.

PATH: The method of searching to locate a specific file on the disk.

PHONIC ENCODING: A method of encoding so that names that sound alike will be found with the same search.

PRECISION The number of places to the right of the decimal.

PRINT: To send output to the assigned output device.

PRINT QUEUE: A place set aside on the disk by the operating system to hold output sent to a printer for printing at a later time.

PRINTER CONFIGURATION See TERMINAL.

PROCEDURAL LANGUAGE The series of commands that are available to use for batch processing or interactive transaction processing of applications.

PROGRAM: An ordered series of instructions that direct the computer to perform as specific task.

PROMPT: A descriptive phrase displayed on the screen that tells the operator that the computer is awaiting a specific input.

QUERY: To extract specific information from a database by means of stating limiting conditions.

RECORD: One complete group of items from an application. This group is treated as a unit.

RELATIONAL DATABASE SYSTEM: A system in which data stored in different files can be linked to form a meaningful relationship. Data redundancy is avoided by the linking mechanism.

REPORT: A written output of data from one or more applications.

REINDEX: To build a new index file. This is required as a result of changing the **key** status of a item.

RENNAME: To change the name of an application.

REORGANIZE To rearrange the data in an application data file after a change has been made in Create/Change.

RETURN KEY: Signals the computer that you are ready to proceed.

ROW. A horizontal division of the screen. Most screens have 24 or 25 rows where information can be displayed. Synonymous with line.

SECURITY LEVEL A number between O and 9 that is assigned to a user, to an application and to the functions performed against an application. These levels are compared to grant or deny access to various parts of the system.

SEARCH: To examine a series of records for those that meet the selection criteria.

SEARCH QUALIFIERS: The values entered in specific fields, against which records will be compared to limit the number of records found and displayed.

SELECTION CRITERIA: A logical statement that is used to limit the number of records.

SOURCE FILE: A program that is written in a computer language. It must be translated into another form before the computer can actually understand the commands.

STRING: A sequence of characters, usually enclosed in single quotations.

SUB-DIRECTORY: A directory that is below the root directory in a DOS directory structure. See your DOS manual for additional information.

SUB-REPORT: A small portion of the whole report that pertains to a particular section of information.

SYNTAX: The lexical order of a language. Similar to grammar.

SYSTEM MANAGER: The person responsible for the security provisions of TEAM-UP.

TEMPLATE: A mask that is placed over a data record to give it meaning and order.

TERMINAL CONFIGURATION: Setting up the TEAM-UP program so that it can correctly communicate with your particular computer or terminal.

TOGGLE: To switch between two or more states, e.g. the [INS] key switches between insert on and insert off.

TRANSACTION An event that causes some work to be performed and some change to be made to an application. The Access Data commands Enter, Update and Delete all cause transactions to occur against the application.

TRUNCATE To cut off data that will not fit in a particular field. All data is truncated from the right.

UPDATE: To change one or more values stored in a record.

USER ID NUMBER: A number assigned a user in System Security that will allow that user to uniquely stamp all records that he enters. This number is used to prevent one user from seeing another user's data records.

USERNAME: The name that uniquely identifies a TEAM-UP user and that user's authorization codes.

WILDCARD: Used in a search qualifier to indicate that any value should be accepted. Access Data treats a space as a wildcard.

NSRP READER RESPONSE CARD

We would appreciate your comments on this report. Please take a few minutes to complete and return this postage-paid card. Thank you.

Name		•How Did You Receive Report? □ Mai I ed directly to you □ Referred to you by someone else
Organization		
Phone		•Did/Will You Pass Report On To Someone Else?
		□ Yes □ No
. Overall Quali ☐ Excellent	ty of Report ☐ Good ☐ Fair ☐ Poor	•In Your Opinion, Is Anything Missing That Would Make This Report Better?
Usefulness to You/Your Organization		□ Yes
□ Very Useful	☐ Moderately Useful	•General Comments
☐ Used Often	□ Used Rarely	
		NSRP 0327
NSRP READER RESPONSE CARD We would appreciate your comments on this report. Please take a few minutes to complete and return this postage-paid card. Thank you.		
		How Did You Receive Report?☐ Mailed directly to you☐ Referred to you by someone else

Phone ___

□ Excellent

.Overall Quality of Report

☐ Good ☐ Fair

☐ Not Applicable

. Usefulness to You/Your Organization

□ Very Useful □ Moderately Useful

☐ Used Often ☐ Used Rarely

.Did/Will You Pass Report On To Someone Else?

* In Your Opinion, Is Anything Missing That

NSRP 0327

□ No

Would Make This Report Better?

.General Comments

☐ Yes

□ Poor



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National Steel and Shipbuilding Co.

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NSRP Coordinator

The University of Michigan Transportation Research Institute
Marine Systems Division
2901 Baxter Rd. Am Arbor, MI 48109-2150 Phone: (313) 763-2465 Fax: (313) 936-1081